AGENDA
COMMITTEE OF THE WHOLE
November 9, 2021
2200 Harnish Drive
Village Board Room
7:30 P.M.

Trustee Smith - Chairperson
Trustee Brehmer
Trustee Auger
Trustee Spella
Trustee Glogowski
Trustee Dianis
President Sosine

- AGENDA -

1. **Roll Call – Establish Quorum**
2. **Public Comment – Audience Participation**
   (*Persons wishing to address the Committee must register with the Chair prior to roll call.*)
3. **Presentation - CMAP Pavement Management Program**
4. **Community Development**
5. **General Administration**
   A. Consider a Resolution Accepting the Police Pension Municipal Compliance Report for Fiscal Year Ending April 30, 2021
   B. Consider a Resolution Accepting the Actuarial Funding Report for the Algonquin Police Pension Fund for the Contribution Year May 1, 2021 to April 30, 2022
   C. Consider a Resolution for the 2021 Property Tax Levy
   D. Consider a Resolution Approving a Second Amendment to the Site Agreement with T3 Tower 2, LLC for Subleasing Ground Space at the Algonquin Cemetery
   E. Consider Special/Public Event Request for Miracle on Main on December 4, 2021
6. **Public Works & Safety**
7. **Executive Session**
8. **Other Business**
9. **Adjournment**

CMAP Pavement Management Program

BOARD PRESENTATION – VILLAGE OF ALGONQUIN
NOVEMBER 9, 2021

Mark P. Gardner, P.E.
APTech Project Manager

CMAP Pavement Management Work Plan

The Chicago Metropolitan Agency for Planning (CMAP) is the region's official comprehensive planning organization.

This program supports effective and efficient use of member agency resources using pavement management tools and incorporation of preservation approaches in agencies.

CMAP hired APTech to implement pavement management for the Village.

Program Goals

- Promote and support asset management at the local level
- Implement the PAVER pavement management system
- Perform a comprehensive pavement condition survey
- Evaluate the impact of the Village's existing funding level on future pavement conditions
- Determine funding levels required to:
  - ✓ Maintain current pavement conditions
  - ✓ Improve current pavement conditions
  - ✓ Eliminate rehabilitation and reconstruction backlog
- Recommend pavement preservation and rehabilitation projects

Why Pavement Management Makes Sense

- According to the AASHTO PM Guide, Pavement Management provides a systematic approach that enables agencies to evaluate consequences of investment decisions and determine most cost-effective use of resources.
- Agencies have reported benefits including:
  - Developing strategies to use resources more efficiently
  - Data-driven, performance-based decision making
  - Better understand current and future road needs
  - Better respond to queries both internal and external
  - Better communication
  - Improved transparency in decision making
  - Better credibility

CMAP PM Project Overview

- Working with the Village;
  - Define pavement network
  - Assess treatment types and costs
  - Gather budget information
- Collect 2021 pavement condition information
- Implement PAVER pavement management software
- Run "scenario" analyses and present results to the Village
- Document work, results, and recommendations in report
- Provide PAVER training
- Village Board presentation

Pavement Data Collection and Pavement Management System Implementation for the Village of Algonquin, Illinois

Prepared For:
The Village of Algonquin

In Association With:
Chicago Metropolitan Agency for Planning

Prepared By:
Applied Pavement Technology, Inc.
115 W. Main Street, Suite 400
Urbana, IL 61801
217-398-3977
www.appliedpavement.com

October 2021

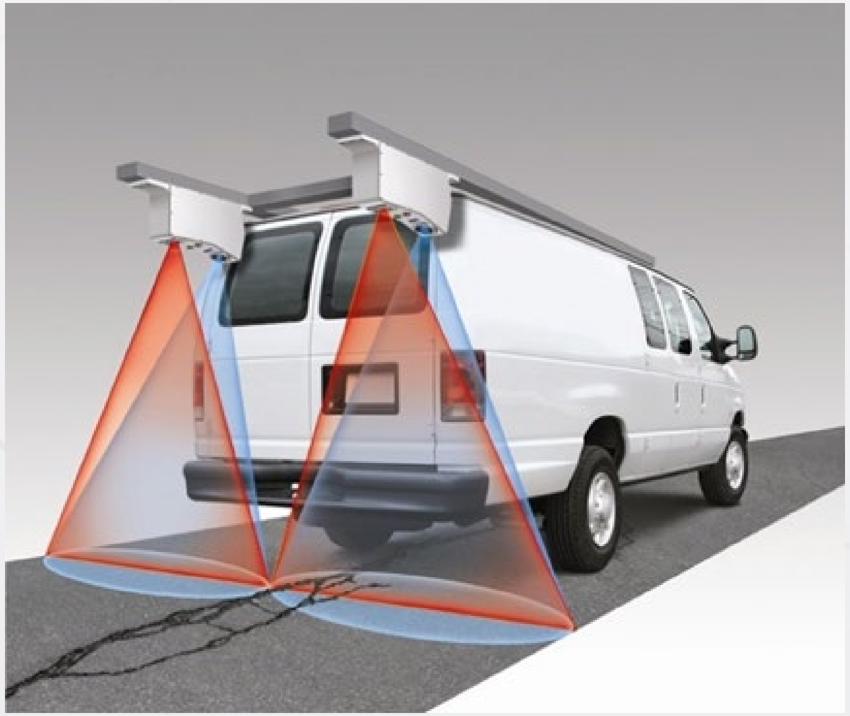
Data Collection

APTech's EDGE automated data collection van - March 2021

- LCMS sensors
- Road Surface Profiler,
- ROW Cameras (front-facing 3 angles and rear-facing)
- GPS receivers for spatial positioning.

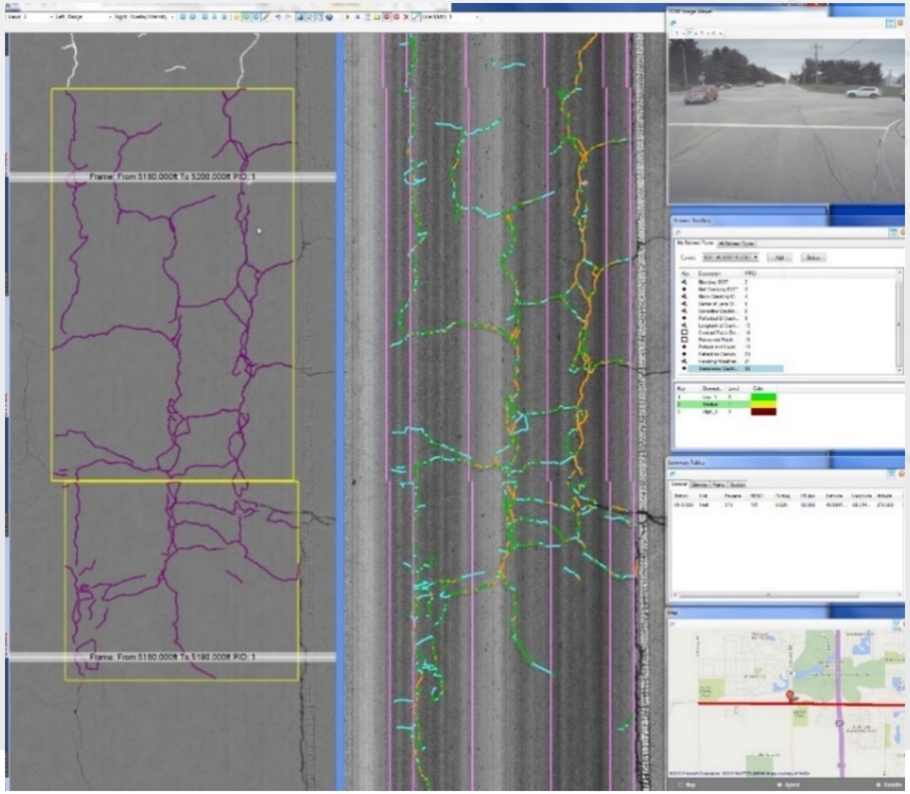
The van drove Village roadways with a driver watching the road and a separate technician reviewing data in real time.

Safe, efficient, unobtrusive.

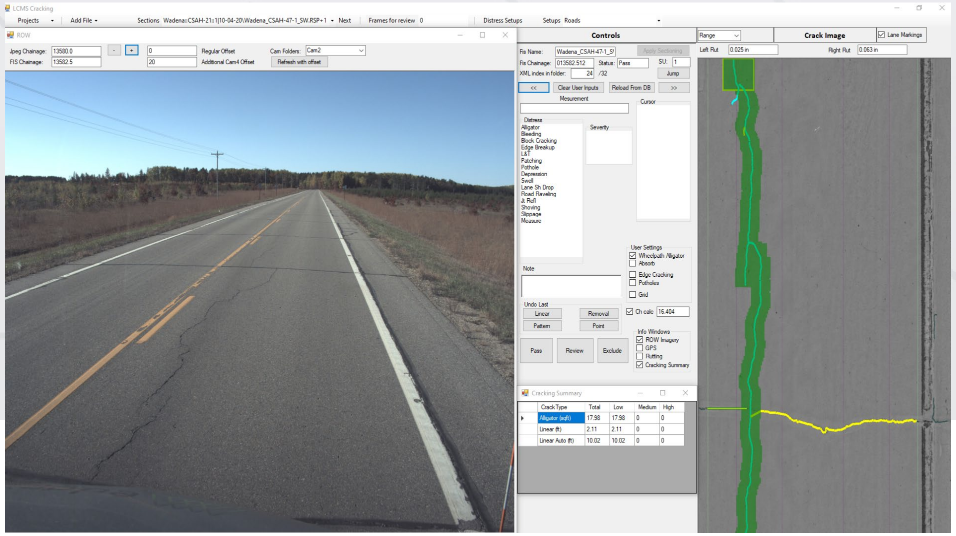


Distress Data Extraction

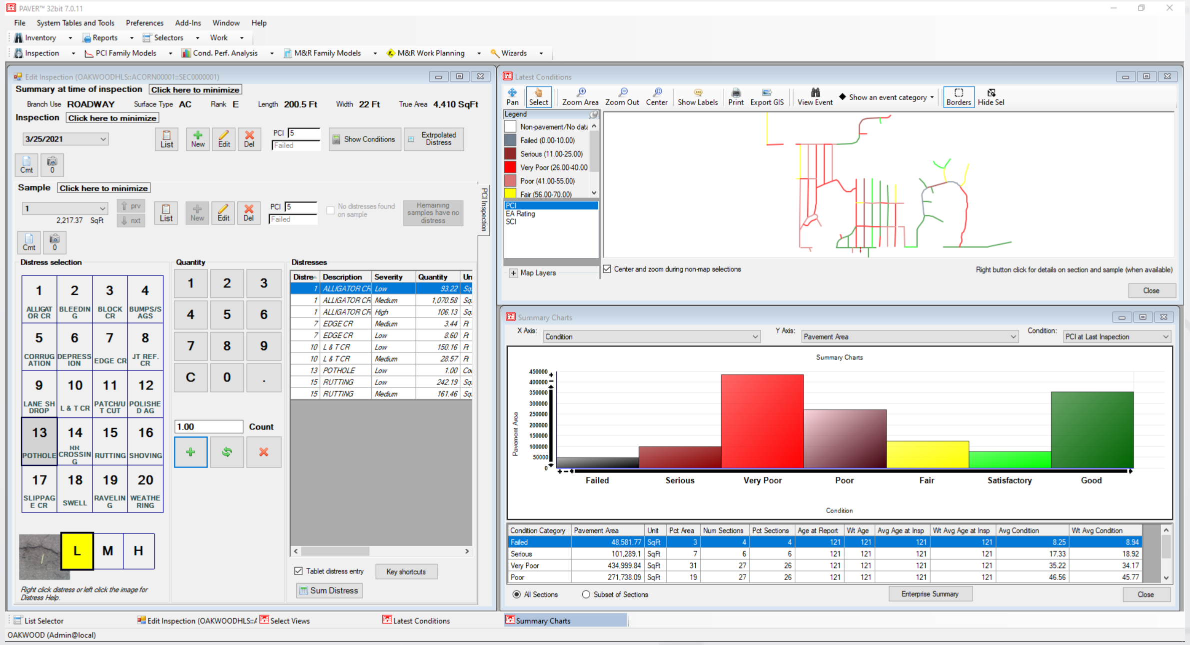
Laser Crack Measurement System produced range and intensity 3D images. Automated image processing algorithms initially identified distress.



Trained surveyors reviewed on workstations to complete the surveys.



Calculation of Pavement Condition Index (PCI)



Distress

- Type
- Severity
- Extent

PCI Range		Condition Category	
100	86	Good	
85	71	Satisfactory	
70	56	Fair	
55	41	Poor	
40	26	Very Poor	
25	11	Serious	
10	0	Failed	

Pavement Condition Examples

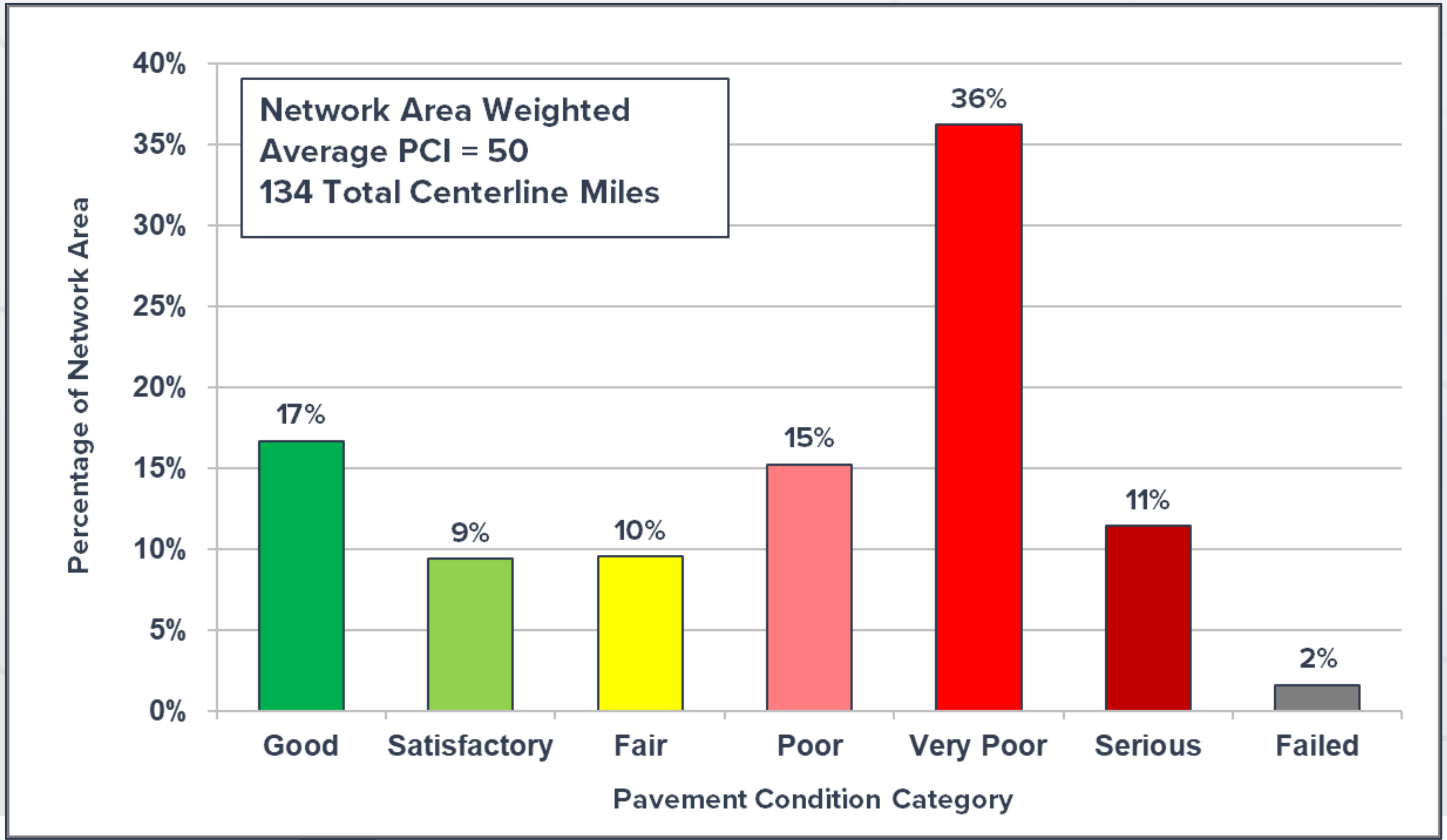
Pavement Condition Examples (cont.)

Pavement Condition Examples (cont.)

Pavement Condition Examples (cont.)

PCI Results – Network Level (Percentage of Area)

PCI Range		Condition Category	
100	86	Good	
85	71	Satisfactory	
70	56	Fair	
55	41	Poor	
40	26	Very Poor	
25	11	Serious	
10	0	Failed	



PCI Range		Condition Category	
100	86	Good	
85	71	Satisfactory	
70	56	Fair	
55	41	Poor	
40	26	Very Poor	
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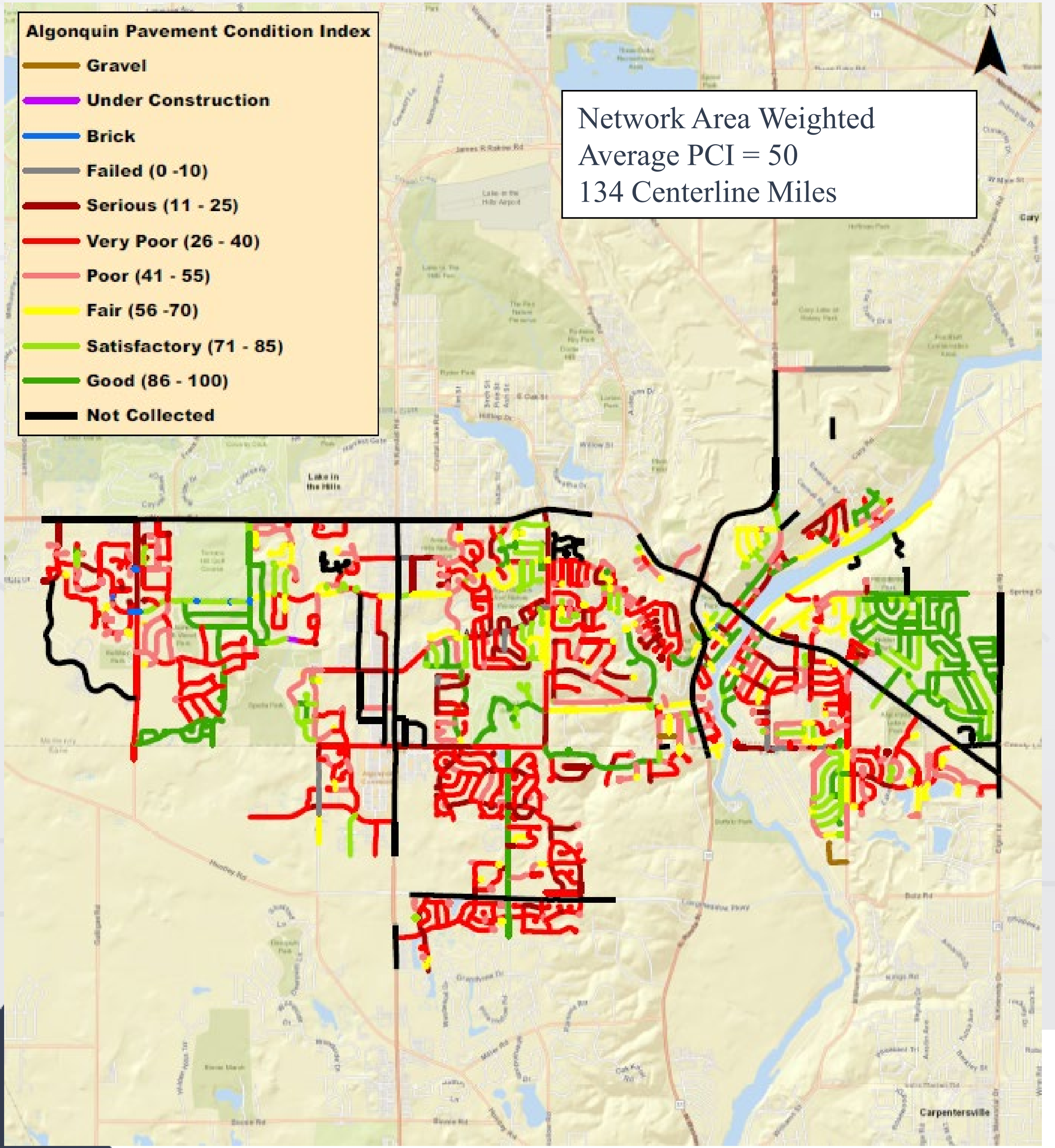
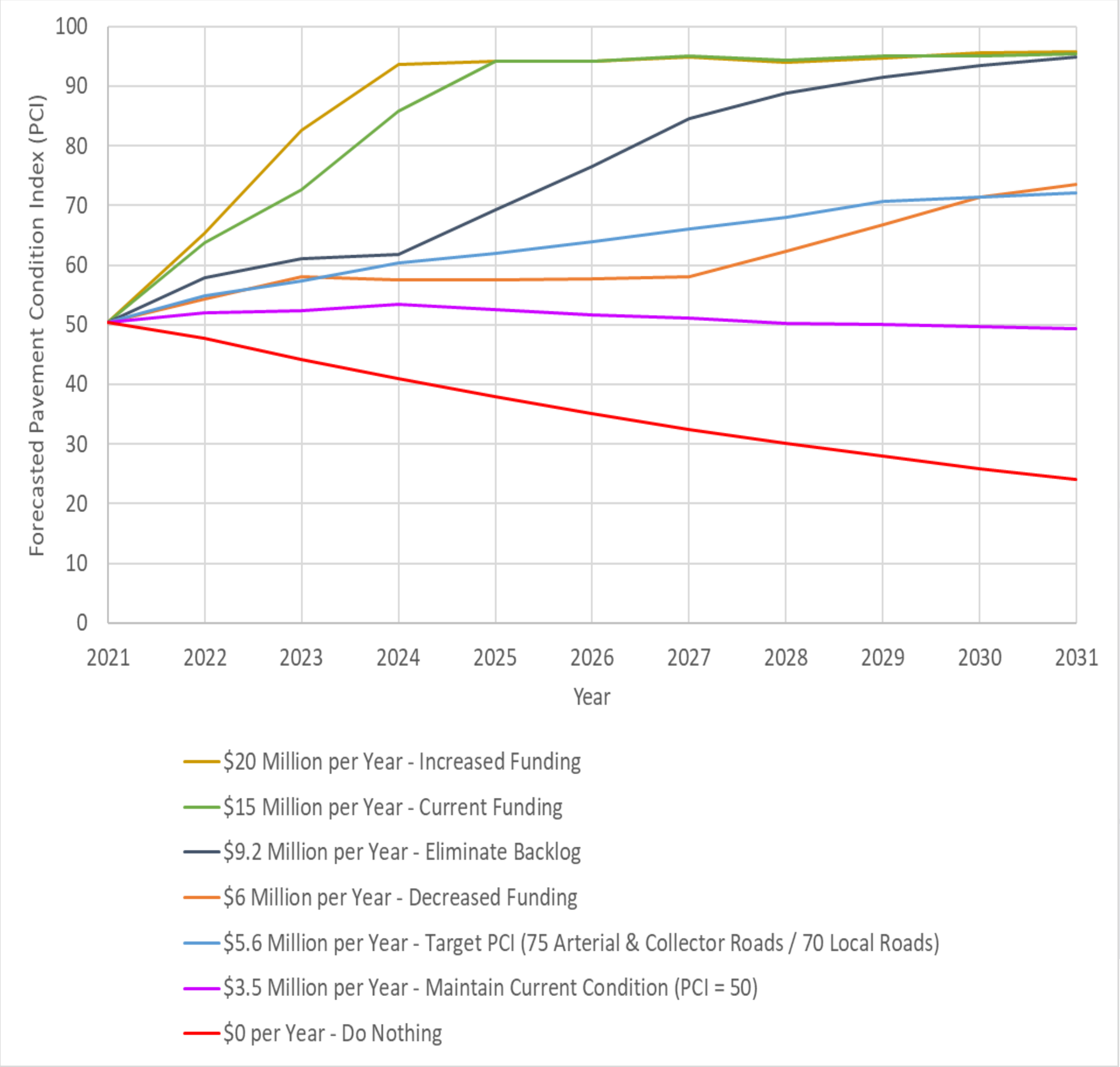
10	0	Failed	



Budget Analyses Forecasted PCI (10-year analysis)

- $20M/yr – Increased Funding – Eliminate backlog in 3 years
- $15M/yr – Projected Funding – Eliminate backlog 4 years
- $9.2M/yr – Eliminate Backlog 10 years
- $6M/yr Decreased Funding – PCI = 73 in 10 years
- $5.6M per yr - Target PCI – 75 Arterial and Collector, 70 Local
- $3.5M/yr – Maintain current PCI (50)
- $0/yr (safety repairs only) – decline in PCI to 24 in ten years

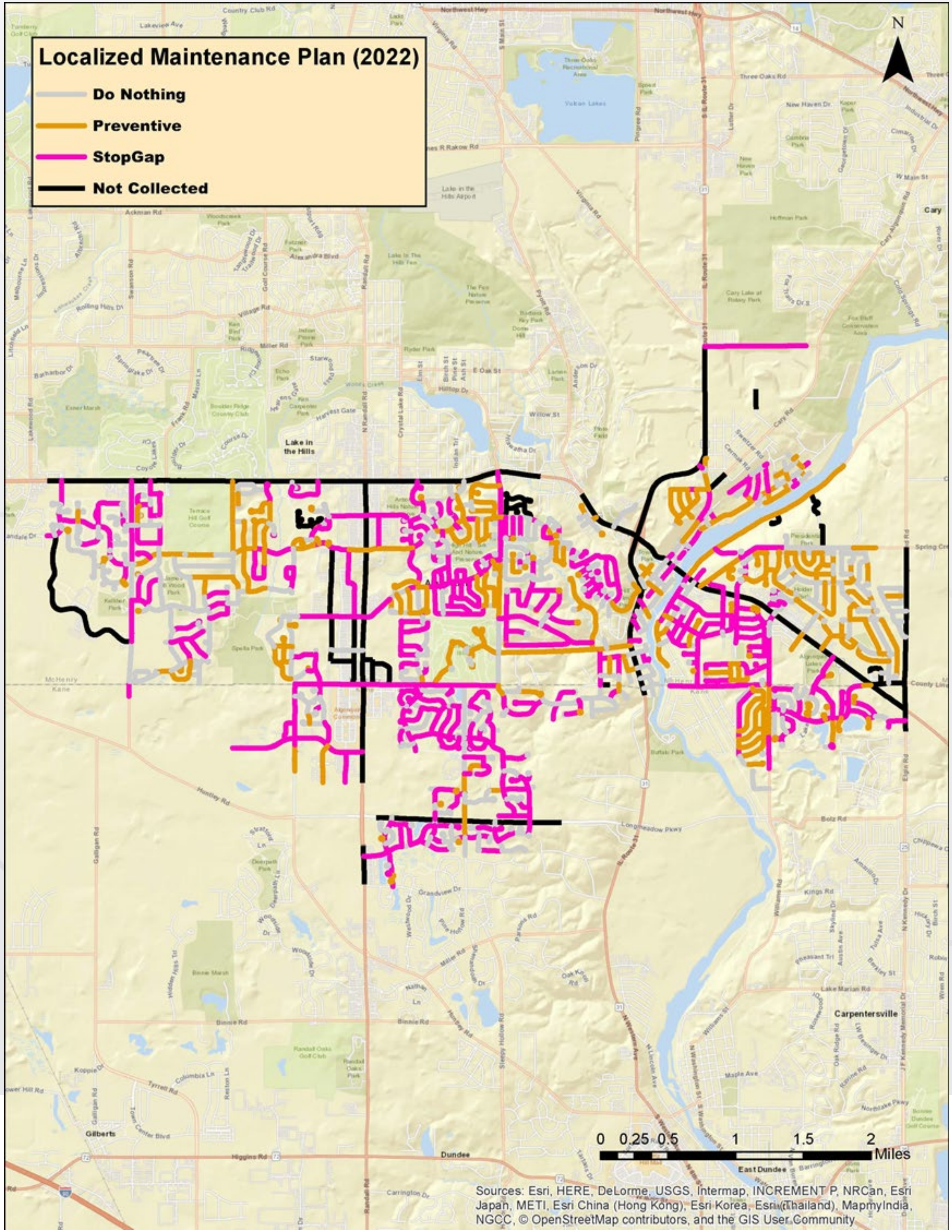


Overview of Budget Scenario Results

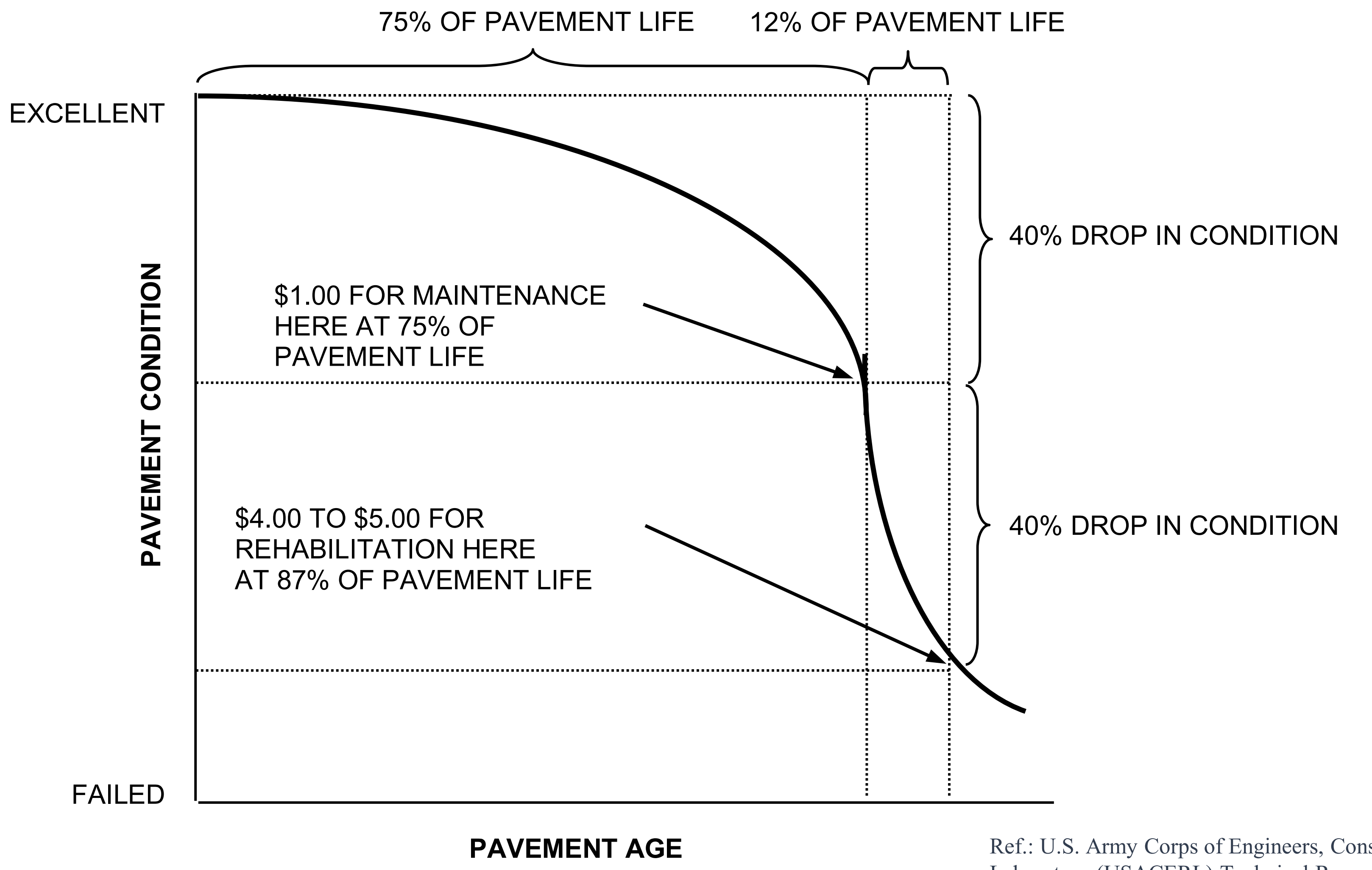
Funding Scenario	Total 10-Year Funded Costs	Remaining M&R Backlog in 2031	Total Funded + Backlog	Forecasted PCI in 2031
$20 Million per Year	$61.5M	$0	$61.5M	96
$15 Million per Year	$64.5M	$0	$64.5M	95
$9.2 Million per Year - Eliminate Backlog	$92M	$0	$92M	95
$6 Million per Year - Decreased Funding	$60M	$91M	$151M	73
$5.6 Million per Year Target PCI (75 Art., 70 Local)	$56M	$94M	$150M	72
$3.5 Million per Year - Maintain Current Condition (PCI = 50)	$35M	$129M	$164M	49
$0 per Year - Do Nothing	$0	$198M	$198M	24

Preservation – A Little Goes a Long Way

Work Description	Work Quantity	Work Cost
Safety (AC) Patching and Repairs	101,828 sf	$509,141
Safety (PCC) Slab Replacement	6,683 sf	$80,198
Patching (AC)	18,975 sf	$52,750
Crack Sealing (AC)	25,722 lf	$10,289
Crack Sealing (PCC)	612 lf	$919
Total		$653,296



Pavement Life Cycle and Expected Costs



Ref.: U.S. Army Corps of Engineers, Construction Engineering Laboratory (USACERL) Technical Report M-90/05 (Shahin and Walther 1990)

Recommendations

- Maintain the PMS
  - Annual updates to work history
  - Update condition data about every 3-5 years
  - Update treatment unit costs
- Use the PMS to make accountable, performance-based, data-driven decisions about work needs, and to demonstrate progress towards achieving goals.
- Use preventive maintenance (preservation) approaches to make the most effective use of available resources by extending pavement life.

Acknowledgements

- Village of Algonquin
- Chicago Metropolitan Agency for Planning (CMAP)
- AECOM– Program management support for CMAP

Discussion

- Thanks for your time attention!
- Any questions?

Contact Information:

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512-222-6444

VILLAGE OF ALGONQUIN
GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: October 28, 2021

TO: Tim Schloneger, Village Manager

FROM: Michael Kumbera, Assistant Village Manager

SUBJECT: Municipal Compliance Report

Pursuant to House Bill 5088, attached please find the Municipal Compliance Report for the Algonquin Police Pension Fund. The Police Pension Board is required to report annually to the Board of Trustees on the condition of the pension fund at the end of each fiscal year for tax levy purposes.

Recommendation:
Staff recommends the Committee of the Whole forward this item to the Village Board for acceptance by resolution at their meeting on November 16.

C: Susan Skillman, Comptroller

THE VILLAGE OF ALGONQUIN, ILLINOIS
POLICE PENSION FUND

PUBLIC ACT 95-0950
MUNICIPAL COMPLIANCE REPORT

FOR THE FISCAL YEAR ENDED
APRIL 30, 2021

Lauterbach & Amen, LLP
CERTIFIED PUBLIC ACCOUNTANTS
668 NORTH RIVER RD. • NAPERVILLE, ILLINOIS 60563
PHONE 630.393.1483 • FAX 630.393.2516
www.lauterbachamen.com

October 7, 2021

Members of the Pension Board of Trustees
Algonquin Police Pension Fund
Algonquin, Illinois

Enclosed please find a copy of your Municipal Compliance Report for the Algonquin Police Pension Fund for the fiscal year ended April 30, 2021. We have prepared the report with the most recent information available at our office. Should you have more current information, or notice any inaccuracies, we are prepared to make any necessary revisions and return them to you.

The President and Secretary of the Pension Fund are required to sign the report on page 3. If not already included with the enclosed report, please also include a copy of the Pension Fund's most recent investment policy.

The signed Public Act 95-0950 - Municipal Compliance Report must be provided to the Municipality before the tax levy is filed on the last Tuesday in December. We are sending the report via email to promote an environmentally-friendly work atmosphere.

If you have any questions regarding this report, please contact your Client Manager or PSA.

Respectfully submitted,

Lauterbach & Amen, LLP

LAUTERBACH & AMEN, LLP

THE VILLAGE OF ALGONQUIN, ILLINOIS
POLICE PENSION FUND

Public Act 95-950 - Municipal Compliance Report
For the Fiscal Year Ending April 30, 2021

The Pension Board certifies to the Board of Trustees of the Village of Algonquin, Illinois on the condition of the Pension Fund at the end of its most recently completed fiscal year the following information:

1) The total cash and investments, including accrued interest, of the fund at market value and the total net position of the Pension Fund:

	Current Fiscal Year	Preceding Fiscal Year
Total Cash and Investments (including accrued interest)	$43,925,848	$33,385,068
Total Net Position	$43,922,881	$33,382,101

2) The estimated receipts during the next succeeding fiscal year from deductions from the salaries of police officers and from other sources:

Estimated Receipts - Employee Contributions	$440,500
Estimated Receipts - All Other Sources	
Investment Earnings	$2,965,000
Municipal Contributions	$2,135,484

3) The estimated amount required during the next succeeding fiscal year to (a) pay all pensions and other obligations provided in Article 3 of the Illinois Pension Code, and (b) to meet the annual requirements of the fund as provided in Sections 3-125 and 3-127:

(a) Pay all Pensions and Other Obligations	$1,983,700
(b) Annual Requirement of the Fund as Determined by:	
Illinois Department of Insurance	N/A
Private Actuary - Lauterbach & Amen, LLP	
Recommended Municipal Contributions	$2,135,484
Statutory Municipal Contributions	$1,384,759

4) The total net income received from investment of assets along with the assumed investment return and actual investment return received by the fund during its most recently completed fiscal year compared to the total net income, assumed investment return, and actual investment return received during the preceding fiscal year:

	Current Fiscal Year	Preceding Fiscal Year
Net Income Received from Investment of Assets	$9,630,606	$571,028
Assumed Investment Return		
Illinois Department of Insurance	N/A	6.50%
Private Actuary - Lauterbach & Amen, LLP	6.75%	6.75%
Actual Investment Return	24.91%	1.75%

5) The total number of active employees who are financially contributing to the fund:

6) Number of Active Members 44

The total amount that was disbursed in benefits during the fiscal year, including the number of and total amount disbursed to (i) annuitants in receipt of a regular retirement pension, (ii) recipients being paid a disability pension, and (iii) survivors and children in receipt of benefits:

	Number of	Total Amount Disbursed
(i) Regular Retirement Pension	18	$1,375,098
(ii) Disability Pension	4	$172,852
(iii) Survivors and Child Benefits	0	$0
Totals	22	$1,547,950

THE VILLAGE OF ALGONQUIN, ILLINOIS
POLICE PENSION FUND

Public Act 95-950 - Municipal Compliance Report
For the Fiscal Year Ending April 30, 2021

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7) The funded ratio of the fund:

	Current Fiscal Year	Preceding Fiscal Year
Illinois Department of Insurance	N/A	69.04%
Private Actuary - Lauterbach & Amen, LLP	74.44%	68.94%

8) The unfunded liability carried by the fund, along with an actuarial explanation of the unfunded liability:
Unfunded Liability:

Illinois Department of Insurance	N/A
Private Actuary - Lauterbach & Amen, LLP	$13,574,061

The accrued liability is the actuarial present value of the portion of the projected benefits that has been accrued as of the valuation date based upon the actuarial valuation method and the actuarial assumptions employed in the valuation. The unfunded accrued liability is the excess of the accrued liability over the actuarial value of assets.

9) The investment policy of the Pension Board under the statutory investment restrictions imposed on the fund.

Investment Policy - See Attached.

Please see Notes Page attached.

CERTIFICATION OF MUNICIPAL POLICE
PENSION FUND COMPLIANCE REPORT

The Board of Trustees of the Pension Fund, based upon information and belief, and to the best of our knowledge, hereby certify pursuant to §3-143 of the Illinois Pension Code 40 ILCS 5/3-143, that the preceding report is true and accurate.

Adopted this 27th day of October, 2021

President Stan W. Helgerson Date 10/27/2021

Secretary Andrew Dobe Date 10/27/2021

THE VILLAGE OF ALGONQUIN, ILLINOIS
POLICE PENSION FUND

Public Act 95-950 - Municipal Compliance Report
For the Fiscal Year Ending April 30, 2021

INDEX OF ASSUMPTIONS

1) Total Cash and Investments - as Reported at Market Value in the Audited Financial Statements for the Years Ended April 30, 2021 and 2020.

   Total Net Position - as Reported in the Audited Financial Statementsfor the Years Ended April 30, 2021 and 2020.

2) Estimated Receipts - Employee Contributions as Reported in the Audited Financial Statements for the Year Ended April 30, 2021 plus 3.75% Increase (Actuarial Salary Increase Assumption) Rounded to the Nearest $100.

   Estimated Receipts - All Other Sources:

   Investment Earnings - Cash and Investments as Reported in the Audited Financial Statements for the Year Ended April 30, 2021, times 6.75% (Actuarial Investment Return Assumption) Rounded to the Nearest $100.

   Municipal Contributions - Recommended Tax Levy Requirement as Reported by Lauterbach & Amen, LLP, Actuarial Valuation for the Year Ended April 30, 2021.

3) (a) Pay all Pensions and Other Obligations - Total Non-Investment Deductions as Reported in the Audited Financial Statements for the Year Ended April 30, 2021, plus a 25% Increase, Rounded to the Nearest $100.

   (b) Annual Requirement of the Fund as Determined by:

   Illinois Department of Insurance - No April 30, 2021 Actuarial Valuation available at the time of this report.

   Private Actuary - Lauterbach & Amen, LLP:

   Recommended Amount of Tax Levy as Reported by Lauterbach & Amen, LLP in the April 30, 2021 Actuarial Valuation.

   Statutorily Required Amount of Tax Levy as Reported by Lauterbach & Amen, LLP in the April 30, 2021 Actuarial Valuation.

INDEX OF ASSUMPTIONS

4) Net Income Received from Investment of Assets - Investment Income (Loss) net of Investment Expense, as Reported in the Audited Financial Statements for the Years Ended April 30, 2021 and 2020.

   Assumed Investment Return:

   Illinois Department of Insurance - Preceding Fiscal Year Interest Rate Assumption as Reported in the April 30, 2020 Actuarial Valuation. No April 30, 2021 Actuarial Valuation available at the time of this report.

   Private Actuary - Current and Preceding Fiscal Year Interest Rate Assumption as Reported in the Years Ended April 30, 2021 and 2020 Actuarial Valuations.

   Actual Investment Return -Net Income Received from Investments as Reported Above as a Percentage of the Average of the Beginning and Ending Balances of the Fiscal Year Cash Investments, Excluding Net Investment Income, Gains, and Losses for the Fiscal Year Return Being calculated, as Reported in the Audited Financial Statements for the Fiscal Years Ended April 30, 2021 and 2020.

5) Number of Active Members - Illinois Department of Insurance Annual Statement for April 30, 2021 - Schedule P.

6) (i) Regular Retirement Pension - Illinois Department of Insurance Annual Statement for April 30, 2021 - Schedule P for Number of Participants and Expense page 1 for Total Amount Disbursed.

   (ii) Disability Pension - Same as above.

   (iii) Survivors and Child Benefits - Same as above.

INDEX OF ASSUMPTIONS

7) The funded ratio of the fund:

Illinois Department of Insurance - Preceding Fiscal Year Net Present Assets as a percentage of Total Assets as Reported in the April 30, 2020 Actuarial Valuation. No April 30, 2021 Actuarial Valuation available at the time of this report.

Private Actuary - Current and Preceding Fiscal Year Net Present Assets as a percentage of Total Assets as Reported in the April 30, 2021 and 2020 Actuarial Valuations.

8) Unfunded Liability:

Illinois Department of Insurance - Deferred Asset (Unfunded Accrued Liability) - No April 30, 2021 Actuarial Valuation available at the time of this report.

Private Actuary - Deferred Asset (Unfunded Accrued Liability) as Reported by Lauterbach & Amen, LLP in the April 30, 2021 Actuarial Valuation.

VILLAGE OF ALGONQUIN

POLICE PENSION FUND
INVESTMENT POLICY

1.0 **Policy:**

It is the policy of the Algonquin Police Pension Fund to invest pension funds in a manner which will preserve the actuarial soundness of the plan, while meeting the cash flow demands of the fund and conforming to all state statutes governing the investment of police pension funds.

2.0 **Scope:**

This investment policy applies to the assets of the Police Pension Fund of the Village of Algonquin.

3.0 **Prudence:**

Investments shall be made with care, skill, prudence and diligence that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of like character with like aims. (Prudent Expert Rule)

Investment officers acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

4.0 **Investment Principles:**

A. Investments shall be made solely in the interest of the beneficiaries of the Fund.
B. Assets shall be invested in proportion to the present value of the Fund's liabilities.
C. Investments shall be diversified to minimize the risk of large losses, unless under the circumstances it is clearly prudent to not do so.
D. The Fund may employ one or more investment managers of varying styles and philosophies to attain the Fund's objectives.
E. Cash is to be employed productively at all times, by investment in short term cash equivalents to provide safety, liquidity and return.

5.0 **Investment Objectives:**

In order to meet its needs, the investment strategy of the Fund is to emphasize total return; that is, the aggregated return from capital appreciation and dividend and interest income.

The Fund seeks long term growth of principal while avoiding excessive market risk. Short term volatility will be tolerated in as much as it is consistent with the volatility of a comparable market index.

6.0 **Asset Allocation:**

The following policy shall govern the overall equity/fixed commitment of the Fund:

Acceptable Ranges of Equity Commitment

Minimum	Target	Maximum
45%	65%	65%

Acceptable Ranges of Corporate Bonds within the Fixed Income Portfolio

Minimum	Target	Maximum
0%	None	50%

The balance to be in Fixed Income and cash equivalents. Guidelines describing permissible types of equities and fixed income investments are provided in Sections 10, 11 and 14 to follow.

6.1 **Specific Investment Goals:**

Over a 5-year investment horizon, it is the goal for the Plan to meet or exceed the return of a blend of benchmark indices that reflect the asset allocation of the Pension Fund Portfolio.

The above goals are the objectives of the aggregate Fund, and are not meant to be imposed on each investment account. The goal of each investment and or manager over the investment horizon, shall be to: Meet or exceed the market index or blended market index selected and agreed upon by the Trustees that most closely corresponds to the style of management.

6.2 **Portfolio Rebalancing:**

The portfolio will be reviewed quarterly and rebalanced at least annually using the market value of the portfolio.

7.0 **Delegation of Authority:**

Authority to manage the Village of Algonquin Police Pension Fund's investment program is derived from the following:

The establishment of investment policies is the responsibility of the Police Pension Board shall establish written procedures for the operation of the investment program consistent with this investment policy. Procedures should include references to: safekeeping, delivery vs. payment, investment accounting, wire transfer agreements and collateral/depository agreements. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Board. The Board shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials. The Board may from time to time amend the written procedures in a manner not inconsistent with this policy or with state statutes.

8.0 **Ethics and Conflicts of Interest**:

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. Employees and investment officials shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio. Officers shall refrain from undertaking personal investment transaction with the same individual with whom business is conducted on behalf of their entity.

9.0 **Authorized Financial Dealers and Institutions**:

The Village Treasurer will maintain a list of financial institutions authorized to provide investment services. In addition, a list will also be maintained of approved security broker/dealers selected by credit worthiness. All authorized firms must be "primary" dealers or regional dealers that qualify under Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule). No public deposit shall be made except on a qualified public depository as established by state statutes.

Unless transacted by the Investment Manager, all financial institutions and broker/dealers who desire to become qualified bidders for investment transactions must supply the Treasurer with the following:

- audited financial statements
- proof of Financial Industry Regulatory Agency (FINRA) certification
- proof of state registration
- completed broker/dealer questionnaire
- certification of having read the Village's investment policy
- depository contracts

An annual review of the financial condition and registration of qualified bidders will be conducted by the Treasurer.

A current audited financial statement is required to be on file for each financial institution and broker/dealer in which the village invests.

10.0 **Investment Guidelines**:

Investments of the Fund shall be made with a firm authorized to provide investment services (Section 9).

No more than 20% of the portfolio shall be invested in any issuer to the exclusion of U.S. Treasury Securities.

10.1 **Liquidity:**

The investment portfolio shall remain sufficiently liquid to meet all cash flow requirements that may be reasonably anticipated.

11.0 **Authorized and Suitable Investments:**

The Fund may invest in any type of security allowed for in Illinois Compiled Statutes (40 ILCS 5/1-113.1-1-113.4a) regarding the investment of pension funds. Approved investments include:

A. Interest bearing direct obligations of the United States of America.
B. Interest bearing obligations to the extent that they are fully guaranteed or insured as to payment of principal and interest by the United States of America.
C. Interest bearing bonds, notes, debentures, or other similar obligations of agencies of the United States of America. For the purposes of this Section, "agencies of the United States of America" includes:
   (i) The Federal National Mortgage Association
   (ii) Federal land banks, federal intermediate credit banks, federal farm credit banks, and any other entity authorized to issue direct debt obligations of the United States of America under the Farm Credit Acts of 1971 or amendments to that Act
   (iii) Federal home loan banks and the Federal Home Loan Mortgage Corporation; and
   (iv) Any agency created by Act of Congress that is authorized to issue direct debt obligations of the United States of America.
D. Interest bearing savings accounts or certificates of deposit, issued by federally chartered banks or savings and loan associations, to the extent that the deposits are insured by agencies or instrumentalities of the federal government.
E. Interest bearing savings accounts or certificates of deposit, issued by State of Illinois chartered banks or savings and loan associations, to the extent that the deposits are insured by agencies or instrumentalities of the federal government.
F. Investments in credit unions, to the extent that the investments are insured by agencies or instrumentalities of the federal government.
G. Pooled interest bearing accounts managed by the Illinois Public Treasurer's Investment Pool (Illinois Funds) in accordance with the Deposit of State Moneys Act and interest bearing funds or pooled accounts of the Illinois Metropolitan Investment Funds, or funds managed, operated, and administered by banks, subsidiaries of banks, or subsidiaries of bank holding companies in accordance with the laws of the State of Illinois.
H. Interest bearing bonds or tax anticipation warrants of any county, township, or municipal corporation of the State of Illinois.
I. Direct obligations of the State of Israel, subject to the conditions and limitations of item (5.1) of Section 1-113.
J. Money market mutual funds managed by investment companies that are registered under the federal Investment Company Act of 1940 and the Illinois Securities Law of 1953 and are diversified, open-ended management investment companies; provided that the portfolio of the money market mutual fund is limited to the following:
   (i) Bonds, notes certificates of indebtedness, treasury bills, or other securities that are guaranteed by the full faith and credit of the United States of America as to principal and interest.
   (ii) Bonds, notes debentures, or other similar obligations of the United States of America or its agencies.
   (iii) Short term obligations of corporations organized in the United States with assets exceeding $400,000,000, provided that (A) the obligations mature no later than 180 days from the date of purchase, (B) at the time of purchase, the obligations are rated by at least 2 standard national rating services at one of their 3 highest classifications, and (C) the

obligations held by the mutual fund do not exceed 10% of the corporation's outstanding obligations.

K. General accounts of life insurance companies authorized to transact business in Illinois.

L. Any combination of the following, not to exceed 50% as of July 1, 2011 and 55% as of July 1, 2012, of the pension fund's net assets:

  (i) Separate accounts that are managed by life insurance companies authorized to transact business in Illinois and are comprised of diversified portfolios consisting of common or preferred stocks, bonds, or money market instruments.

  (ii) Separate accounts that are managed by insurance companies authorized to transact business in Illinois, and are comprised of real estate or loans upon real estate secured by first or second mortgages.

  (iii) Mutual Funds that meet the following requirements: (a) the mutual fund is managed by an investment company and registered under the Federal Investment Company Act of 1940 and registered under the Illinois Securities Law of 1953; (b) the mutual fund has been in operation for at least 5 years; (c) the mutual fund has total net assets of $250 million or more, and; (d) the mutual fund is comprised of diversified portfolio of common or preferred stocks, bonds, or money market instruments.

  (iv) Through an appointed investment advisor, as defined under Sections 1- 101.4 and 1- 113.5, may, through that investment adviser, invest an additional portion of its assets in common and preferred stocks and mutual funds. The stocks must meet all of the following requirements: (a) the common stocks must be listed on a national securities exchange or board of trade (as defined in the Federal Securities Exchange Act of 1934 and set forth in paragraph G of Section 3 of the Illinois Securities Law of 1953) or quoted in the National Association of Securities Dealers Automated Quotation System National Market System; (b) the securities must be of a corporation in existence for at least 5 years; (c) The market value of stock in any one corporation may not exceed 5% of the cash and invested assets of the pension fund, and the investments in the stock of any one corporation may not exceed 5% of the total outstanding stock of that corporation; (d) The straight preferred stocks or convertible preferred stocks must be issued or guaranteed by a corporation whose common stock qualifies for investment by the board; and (e) ADR's are excluded.

N. Corporate bonds managed through an investment advisor must meet all of the following requirements:

  i) The bonds must be rated as investment grade by one of the two largest rating services at the time of purchase.

  ii) If subsequently downgraded below investment grade, the bonds must be liquidated by the manager from the portfolio within 90 days after being downgraded.

The fund's total investment in separate accounts and mutual funds shall not exceed 65% of the market value of the pension fund's net present assets stated in its most recent annual report on file with the Illinois Department of Insurance.

Except for pecuniary interests permitted under subsection (f) of Section 3-14-4 of the Illinois Municipal Code or under Section 3.2 of the Public Officer Prohibited Practices Act, no person acting as treasurer or financial officer or who is employed in any similar capacity by or for a public agency may do any of the following:

- have any interest, directly or indirectly, in any investments in which the agency is authorized to invest.
- have any interest, directly or indirectly, in the sellers, sponsors, or managers of those investments.
- receive, in any manner, compensation of any kind from any investments in which the agency is authorized to invest.

Any public agency may also invest any public funds in a Public Treasurers' Investment Pool (Illinois Funds) created under Section 17 of the State Treasurer Act. Any public agency may also invest any public funds in a fund managed, operated, and administered by a bank, subsidiary of a bank, or subsidiary of a bank holding company or use the services of such an entity to hold and invest or advise regarding the investment of any public funds.

To the extent a public agency has custody of funds not owned by it or another public agency and does not otherwise have authority to invest such funds, the public agency may invest such funds as if they were its own. Such funds must be released to the appropriate person at the earliest reasonable time, but in no case exceeding 31 days, after the private person becomes entitled to the receipt of them. All earnings accruing on any investments or deposits made pursuant to the provisions of this Act shall be credited to the public agency by or for which such investments or deposits were made, except as provided otherwise in Section 4.1 of the State Finance Act or the Local Governmental Tax Collection Act, and except where by specific statutory provisions such earnings are directed to be credited to and paid to particular fund.

Investment advisers and consultants shall be fiduciaries, as defined in Section 1-101.2, with respect to the Pension Fund, and comply with the provisions of 40 ILCS 5/1-113.5.

Sustainability Factors: Pursuant to 40 ILCS 5/1-113.6 and 1-113.17, the Algonquin Police Pension Fund will include material, relevant, and decision-useful sustainability factors that may be considered by the Pension Bond within the bounds of financial and fiduciary prudence, in evaluating investment decisions. These factors consist of but are not limited to:

a. Corporate governance and leadership factors
b. Environmental factors
c. Social capital factors
d. Human capital factors
e. Business model and innovation factors

12.0 **<u>Collateralization</u>:**

It is the policy of the Fund and in accordance with the GFOA's Recommended Practices on the Collateralization of Public Deposits, the Fund requires that funds on deposit in excess of FDIC limits be secured by some form of collateral. The Fund will accept any of the following assets as collateral:

- Government Securities
- Obligations of Federal Agencies
- Obligations of Federal Instrumentalities

(The Fund reserves the right to accept/reject any form of the above-named securities.)

The Fund also requires that all depositories that hold the Fund's deposits in excess of the FDIC limit must provide and sign a Collateralization Agreement.

The amount of collateral provided will not be less than 110% of the fair market value of the net amount of public funds secured. The ratio of fair market value of collateral to the amount of funds secured will be reviewed monthly, and additional collateral will be required when the ratio declines below the level required and collateral will be released if the fair market value exceeds the required level. Pledged collateral will be held in safekeeping, by an independent third-party depository, or the Federal Reserve Bank of Chicago, designated by the Fund and evidenced by a safekeeping agreement. Collateral agreements will preclude the release of the pledged assets without an authorized signature from the Fund.

13.0 Safekeeping and Custody:

When possible, security transactions entered into by the Fund shall be conducted on a delivery-verses-payment (DVP) basis. Securities will be held by a third-party custodian or qualified broker/dealer as defined by 40 ILCS 5/1-113.7 (A), be designated by the Fund and evidenced by safekeeping receipts and/or itemized statements.

14.0 Diversification:

In order to reduce the risk of default, the investment portfolio of the Fund shall not exceed the following diversification limits unless specifically authorized by the Board of Trustees:

- Monies deposited at a financial institution shall not exceed 75% of the capital stock and surplus of that institution.
- Commercial paper shall not exceed 10% of the Fund's investment portfolio.
- Deposits in the Illinois Public Treasurer's Investment Pool shall not exceed 50% of the Fund's investment portfolio.
- Brokered certificates of deposit shall not exceed 25% of the Fund's investment portfolio.

15.0 Maximum Maturities:

The Fund will attempt to match its investments with anticipated cash flow requirements and future liabilities.

16.0 Internal Controls:

The Treasurer is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the Fund are protected from loss, theft or misuse. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of the control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits require estimates and judgments by management.

Accordingly, the Treasurer shall establish a process for annual independent review by an external auditor to assure compliance with policies and procedures. The internal controls shall address the following points:

- Control of collusion
- Separation of transaction authority from accounting and record keeping
- Custodial safekeeping
- Avoidance of physical delivery securities
- Clear delegation of authority to subordinate staff members.
- Written confirmation of telephone transactions for investments and wire transfers
- Development of a procedure for making wire transfers

17.0 **Investment Manager Performance Review and Evaluation:**

Performance reports generated by the Investment Consultant shall be compiled at least quarterly and communicated to the Trustees for review. The investment performance of total portfolios as well as asset class components will be measured against commonly accepted performance benchmarks. Consideration shall be given to the investment objectives, goals and guidelines as set forth in this statement. The Trustees intend to evaluate the portfolio(s) over at least a three-year period, but reserve the right to terminate a manager for any reason including the following:

- Investment performance which is significantly less than anticipated given the discipline employed and the risk parameters established, or unacceptable justification of poor results.

- Failure to adhere to any aspect of this statement of investment policy, including communication and reporting requirements.

- Significant qualitative changes to the investment management organization.

Investment managers shall be reviewed regularly regarding performance, personnel, strategy, research capabilities, organizational and business matters, and other qualitative factors that may impact their ability to achieve the desired investment results.

18.0 **Reporting:**

The Treasurer or designated third party shall prepare an investment report at least quarterly, including a succinct management summary that provides a clear picture of the status of the current investment portfolio. This management summary will be prepared in a manner which will allow the entity to ascertain whether investment activities during the reporting period have conformed to the investment policy. The report should be provided to the Police Pension Board. The report will include the following:

- A listing of individual securities held at the end of the reporting period.
- Listing of investments by maturity date
- The percentage of the total portfolio which each type of investment represents
- The percentage of the total portfolio which each institution is holding
- The percentage of the total portfolio broken down by defined maturity periods
- Principal and type of investment by fund

18.1 **Marking to Market:**

A statement of the market value of the portfolio shall be issued at least quarterly. This will ensure that the minimal amount of review has been performed on the investment portfolio in terms of value and subsequent price volatility. Review should be consistent with the GFOA Recommended Practice on Mark-to-Market Practices for State and Local Government Investment Portfolios and Investment Pools.

19.0 **Investment Policy Adoption:**

The Fund's investment policy shall be adopted by resolution of the Algonquin Police Pension Fund. This policy shall be reviewed on an annual basis by the President and any modifications made thereto must be approved by the Police Pension Board.

Amended: 04/29/2020

Stan W. Helgerson

President
Village of Algonquin Police Pension

VILLAGE OF ALGONQUIN

GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: November 1, 2021

TO: Tim Schloneger, Village Manager

FROM: Michael Kumbera, Assistant Village Manager

SUBJECT: Police Pension Fund Actuarial Report and Tax Levy Request

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Attached is a copy of an independent actuarial report provided by Lauterbach and Amen for the Algonquin Police Pension Fund as of May 1, 2021. The fund is 74.44 percent funded (up 5.5 percent) from the prior year and the amortization target remains 100 percent by 2033 (13 years). Some additional highlights of this year's report include:

6.3%	$10.5M	28.4%	$1.5M
Decrease in Required Contribution	Increase in Total Assets	Rate of Return (Market)	Reduction in Unfunded Liability*

**Reduction realized over past four (4) years.*

The Algonquin Police Pension Fund Board of Trustees is requesting that the Village Board levy an amount of $2,135,484 in accordance with the actuarial valuation results for the year beginning May 1, 2021. A copy of this request is attached to this memo.

Recommendation:
Staff recommends the Committee of the Whole forward this item to the Village Board for approval by resolution at their meeting on November 16.

C: Susan Skillman, Comptroller

Actuarial Funding Report

ALGONQUIN POLICE PENSION FUND

Actuarial Valuation
as of May 1, 2021

For the Contribution Year May 1, 2021 to April 30, 2022

LAUTERBACH & AMEN, LLP

Actuarial Valuation – Funding Recommendation

Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

ALGONQUIN POLICE PENSION FUND

Contribution Year Ending: April 30, 2022
Actuarial Valuation Date: May 1, 2021
Utilizing Data as of April 30, 2021

Submitted by:

Lauterbach & Amen, LLP
668 N. River Road
Naperville, IL 60563
Phone: 630.393.1483
www.lauterbachamen.com

Contact:

Todd A. Schroeder
Director
September 10, 2021

LAUTERBACH & AMEN, LLP

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ACTUARIAL CERTIFICATION

This report documents the results of the Actuarial Valuation for the Algonquin Police Pension Fund. The information was prepared for use by the Algonquin Police Pension Fund and the Village of Algonquin, Illinois for determining the Recommended Contribution, under the selected Funding Policy and Statutory Minimum guidelines, for the Contribution Year May 1, 2021 to April 30, 2022. It is not intended or suitable for other purposes. Determinations for purposes other than the Employer's Actuarial Recommended Contribution may be significantly different from the results herein.

The results in this report are based on the census data and financial information submitted by the Village of Algonquin, Illinois, and may include results from the prior Actuary. We did not prepare the Actuarial Valuations for the years prior to May 1, 2016. Those valuations were prepared by the prior Actuary whose reports have been furnished to us, and our disclosures are based on those reports. An audit of the prior Actuary's results was not performed, but high-level reviews were completed for general reasonableness, as appropriate, based on the purpose of this valuation. The accuracy of the results is dependent on the precision and completeness of the underlying information.

In addition, the results of the Actuarial Valuation involve certain risks and uncertainty as they are based on future assumptions, market conditions, and events that may never materialize as assumed. For this reason, certain assumptions and future results may be materially different than those presented in this report. See the *Management Summary* section of this report for a more detailed discussion of the Defined Benefit Plan Risks, as well as the limitations of this Actuarial Valuation on assessing those risks. We are not aware of any known events subsequent to the Actuarial Valuation Date, which are not reflected in this report but should be valued, that may materially impact the results.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The Village of Algonquin, Illinois selected certain assumptions, while others were the result of guidance and/or judgment from the Plan's Actuary or Advisors. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used. The selected assumptions represent our best estimate of the anticipated long-term experience of the Plan, and meet the guidelines set forth in the Actuarial Standards of Practice.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices as prescribed by the Actuarial Standards Board. The undersigned consultants of Lauterbach & Amen, LLP, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render this Actuarial Certification. There is no relationship between the Village of Algonquin, Illinois and Lauterbach & Amen, LLP that impairs our objectivity.

Respectfully Submitted,

LAUTERBACH & AMEN, LLP

Todd A. Schroeder

Todd A. Schroeder, ASA, FCA, EA, MAAA

Robert L. Rietz, Jr., FCA, EA, MAAA

MANAGEMENT SUMMARY

Recommended Contribution
Funded Status
Management Summary – Comments and Analysis
Actuarial Recommended Contribution – Reconciliation

RECOMMENDED CONTRIBUTION

	Prior Valuation	Current Valuation
Recommended Contribution	$2,279,056	$2,135,484
Expected Payroll	$4,455,051	$4,285,133
Recommended Contribution as a Percent of Expected Payroll	51.16%	49.83%

The Recommended Contribution has Decreased by $143,572 from the Prior Valuation.

FUNDED STATUS

	Prior Valuation	Current Valuation
Normal Cost	$1,115,148	$1,039,773
Market Value of Assets	$33,382,101	$43,922,881
Actuarial Value of Assets	$34,561,373	$39,530,593
Actuarial Accrued Liability	$50,134,155	$53,104,654
Unfunded Actuarial Accrued Liability/(Surplus)	$15,572,782	$13,574,061
Percent Funded		
Actuarial Value of Assets	68.94%	74.44%
Market Value of Assets	66.59%	82.71%

The Percent Funded has Increased by 5.50% on an Actuarial Value of Assets Basis.

Management Summary – Comments and Analysis

Contribution Results

The Recommended Contribution is based on the selected Funding Policy and methods that are outlined in the *Actuarial Funding Policies* section of this report.

The Illinois State Statutes for Pension Funds contain parameters that are used to determine the Statutory Minimum Contribution to a public Pension Fund. Those parameters and the resulting Statutory Minimum Contribution are found in the *Illinois Statutory Minimum Contribution* section of this report.

"Contribution Risk" is defined by the Actuarial Standards of Practice as the potential for actual future contributions to deviate from expected future contributions. For example, when actual contributions are not made in accordance to the Plan's Funding Policy, or when future experience deviates materially from assumed. While it is essential for the Actuary and Plan Sponsor to collaborate on implementing a sound and financially feasible Funding Policy, it is important to note that the Actuary is not required, and is not in the position to, evaluate the ability or willingness of the Plan Sponsor to make the Recommended Contribution under the selected Funding Policy.

As a result, while Contribution Risk may be a significant source of risk for the Plan, this Actuarial Valuation makes no attempt to assess the impact of future contributions falling short of those recommended under the selected Funding Policy. Notwithstanding the above, see the *Actuarial Recommended Contribution – Reconciliation* section of this report for the impact on the current Recommended Contribution of any contribution shortfalls or excesses from the prior year.

Defined Benefit Plan Risks

Asset Growth:

Pension funding involves preparing Fund assets to pay for benefits when Members retire. During their working careers, assets grow with contributions and investment earnings; and then, the Pension Fund distributes assets in retirement. Based on the Plan's current mix of Members and Funded Status, the Plan should experience positive asset growth, on average, if the Recommended Contributions are made and expected investment earnings come in. In the current year, the Fund asset growth was positive by approximately $11,000,000.

Asset growth is important in the long-term. Long-term cash flow out of the Pension Fund is primarily benefit payments, and expenses are a smaller portion. The Plan should monitor the impact of expected benefit payments on future asset growth. We assess and project all future benefit payments as part of the determination of liability. The assessment is made on all current Members of the Fund, both active and inactive. For active Members, the assessment includes the probability that Members terminate or retire and begin receiving benefits. In the next 5 years, benefit payments are anticipated to increase 50-55%, or approximately $790,000. In the next 10 years, the expected increase in benefit payments is 120-125%, or approximately $1,900,000. The estimated increase in benefit payments is being compared against the benefits paid to inactive Members during the fiscal year, excluding any refunds of Member Contributions.

Furthermore, plans with a large number of inactive Members have an increased "Longevity Risk". Longevity Risk is the possibility that inactive Members may live longer than projected by the Plan's mortality assumption. As shown in the previous paragraph, benefit payments are expected to increase over the next 5-year and 10-year horizons. The projected increases assume that current inactive Members pass away according to the Plan's mortality assumption. To the extent that current inactive Members live longer than expected, the future 5-year and 10-year benefit projections may be larger than the amounts disclosed in the previous paragraph. Higher levels of benefit payments, payable for a longer period of time, may cause a significant strain to the Plan's cash flow, future Recommended Contributions, and may lead to Plan insolvency.

Unfunded Liability:

Unfunded Liability represents the financial shortfall of the Actuarial Value of Assets compared to the Actuarial Accrued Liability. To the extent that Unfunded Liability exists, the Plan is losing potential investment earnings due to the financial shortfall. Contributions towards Unfunded Liability pay for the lost investment earnings, as well as the outstanding unfunded amount. If payments towards Unfunded Liability are not made, the Unfunded Liability will grow.

In the early 1990s, many Pension Funds in Illinois adopted an increasing payment towards Unfunded Liability due to a change in legislation. The initial payment decreased, and future payments are anticipated to increase annually after that. In many situations, payments early on were less than the interest on Unfunded Liability, which means that Unfunded Liability increased even though contributions were made at the recommended level.

The current Recommended Contribution includes a payment towards Unfunded Liability that is approximately $560,000 greater than the interest on Unfunded Liability. All else being equal, and contributions being made, Unfunded Liability is expected to decrease. The Employer and Fund should anticipate that improvement in the current Percent Funded will be mitigated in the short-term. The Employer and Fund should understand this impact as we progress forward to manage expectations.

Actuarial Value of Assets:

The Pension Fund smooths asset returns that vary from expectations over a 5-year period. The intention over time is that asset returns for purposes of funding recommendations are a combination of several years. The impact is intended to smooth out the volatility of Recommended Contributions over time, but not necessarily increase or decrease the level of contributions over the long-term.

When asset returns are smoothed, there are always gains or losses on the Market Value of Assets that are going to be deferred for current funding purposes, and recognized in future years. Currently, the Pension Fund is deferring approximately $4,400,000 in gains on the Market Value of Assets. These are asset gains that will be recognized in upcoming periods, independent of the future performance of the Market Value of Assets.

In the current valuation, we have recognized approximately $500,000 in additional asset gains from the past five years in order to keep the Actuarial Value of Assets within 10% of the Market Value of Assets. See the *Development of the Actuarial Value of Assets* section of this report for more details.

Cash Flow Risk:
Assets, liabilities, and Funded Status are good metrics to monitor over time to assess the progress of the Funding Policy. However, these metrics may provide limited forward-looking insights. Specifically, the maturity of a Pension Fund can pose certain risks that often cannot be assessed with a point-in-time metric such as Percent Funded.

For example, two different Pension Funds could have the same Percent Funded, but have completely different risk profiles. One Fund might mostly cover active Members with little to no Members in pay status, whereas a second Fund might mostly cover inactive Members with a significant level of annual benefit payments. The latter Fund has a greater "Cash Flow Risk", i.e. a more significant chance that negative cash flows could lead to a deteriorating, rather than improving, Percent Funded over time.

It is important to note that, in general, positive net cash flows are good, but also need to be sufficient to cover the growth in the liabilities (i.e. the Normal Cost as well as interest on the Actuarial Accrued Liability). Typically, when cash flows are assumed to be insufficient to cover the growth in liabilities, the Percent Funded will decline, while future Recommended Contributions will increase.

Benefit Payment Risk:
Ideally, plans in a sound financial position will have the ratio of annual benefits payments to the Market Value of Assets to be less than the Expected Rate of Return on Investments assumption (i.e. 6.75%). Theoretically, in this case it can be considered that investment returns will fully cover the annual benefit payments, and therefore, all Employer and Member Contributions made to the Fund will be used to pay for future benefit accruals and pay down the existing Unfunded Liability. To the extent that the ratio of the annual benefit payments to the Market Value of Assets increases to above the Expected Rate of Return on Investments assumption, the Plan may experience some additional risks, such as the need to keep assets in more liquid investments, inability to pay down Unfunded Liability, and may lead to Plan insolvency.

As of the Valuation Date, the Algonquin Police Pension Fund has a ratio of benefit payments to the Market Value of Assets of 3.52%. In this case, the Plan is currently in a sound financial position and has a reduced amount of Benefit Payment Risk and Cash Flow Risk. It would be expected that adherence to the current Funding Policy would lead to an increasing Percent Funded.

<u>Fund Assets</u>
The results in this report are based on the assets held in the Pension Fund. Assets consist of funds held for investment and for benefit payments as of the Actuarial Valuation Date. In addition, assets may be adjusted for other events representing dollars that are reasonably expected to be paid out from the Pension Fund or deposited into the Pension Fund after the Actuarial Valuation Date as well.

The current Fund assets are audited.

The Fund Assets Used in this Report are Audited.

The Actuarial Value of Assets under the Funding Policy is equal to the Market Value of Assets, with unexpected gains and losses smoothed over 5 years. More detail on the Actuarial Value of Assets can be found in the *Actuarial Funding Policies* section of this report.

Demographic Data

Demographic factors can change from year to year within the Pension Fund. Changes in this category include hiring new Members, Members retiring or becoming disabled, inactive Members passing away, and other changes. Demographic changes can cause an actuarial gain (contribution that is less than expected compared to the prior year) or an actuarial loss (contribution that is greater than expected compared to the prior year).

Demographic gains and losses occur when the assumptions over the one-year period for Member changes do not meet our long-term expectation. For example, if no Members become disabled during the year, we would expect a liability gain. If more Members become disabled than anticipated during the year, we would expect a liability loss. Generally, we expect short-term fluctuations in demographic experience to create gains or losses of 1%-3% of the Actuarial Accrued Liability in any given year, but to balance out in the long-term.

"Demographic Risk" occurs when Plan demographic experience differs significantly from expected. Similar to Longevity Risk discussed previously, additional risk is created when demographic experience differs from the assumed rates of disability, retirement, or termination. Under the chosen assumptions, actuarial gains and/or losses will always occur, as the assumptions will never be exactly realized. However, the magnitude of the gain and/or loss and its influence on the Recommended Contribution largely depends on the size of the Plan.

Based on the number of active Members in the Plan, the Recommended Contribution has a moderate risk of having a significant increase due to demographic experience. For example, 1 new disabled Member would typically generate a substantial increase to the Actuarial Accrued Liability, which in turn, may increase the Recommended Contribution.

In the current report, the key demographic changes were as follows:

New Hires: There were 2 Members of the Fund who were hired during the year. When a Member is admitted to the Pension Fund, the Employer Contribution will increase to reflect the new Member. The increase in the Recommended Contribution in the current year due to the new Member experience is approximately $17,000.

Retirement: There were 2 Members of the Fund who retired during the year. When a Member retires, the Normal Cost will decrease. Any change in the Actuarial Accrued Liability will be considered when determining the amount to pay towards Unfunded Liability each year. The increase in the Recommended Contribution in the current year due to the retirement experience is approximately $12,000.

Termination: There were 3 Members of the Fund who terminated employment during the year. The Fund may be obligated to pay a benefit or a refund of Employee Contributions to the Members in the future. The decrease in the Recommended Contribution in the current year due to the termination experience is approximately $27,000.

Mortality: As inactive Members age and continue to collect benefits, the Fund liability will increase. In the current year, there were 20 inactive Members who maintained their benefit collection status throughout the year. The increase in the Recommended Contribution in the current year due to the mortality experience is approximately $28,000.

Salary Increases: Salary increases were less than anticipated in the current year. This caused a decrease in the Recommended Contribution in the current year of approximately $17,000.

Assumption Changes
The assumptions were not changed from the prior valuation.

Funding Policy Changes
The Funding Policy was not changed from the prior valuation.

ACTUARIAL RECOMMENDED CONTRIBUTION – RECONCILIATION

Actuarial Accrued Liability is expected to increase each year for both interest for the year and as active Members earn additional service years towards retirement. Similarly, Actuarial Accrued Liability is expected to decrease when the Fund pays benefits to inactive Members.

Contributions are expected to increase as expected pay increases under the Funding Policy for the Fund.

	Actuarial Liability	Recommended Contribution
Prior Valuation	$ 50,134,155	$ 2,279,056
Expected Changes	3,078,972	68,373
Initial Expected Current Valuation	$ 53,213,127	$ 2,347,429

Other increases or decreases in Actuarial Accrued Liability (key changes noted below) will increase or decrease the amount of Unfunded Liability in the Plan. To the extent that Unfunded Liability increases or decreases unexpectedly, the contribution towards Unfunded Liability will also change unexpectedly.

	Actuarial Liability	Recommended Contribution
Salary Increases Less than Expected	$ (139,458)	$ (17,155)
Actuarial Experience	30,985	(60,215)
Asset Return Greater than Expected*	-	(154,754)
Contributions Less than Expected	-	20,179
Total Increase/(Decrease)	$ (108,473)	$ (211,945)
Current Valuation	$ 53,104,654	$ 2,135,484

*Impact on the Recommended Contribution due to asset return is on an Actuarial Value of Assets basis.

In the current valuation, we have updated the Actuarial Valuation software used to determine Actuarial Liability. The Actuarial Experience can be attributable to several factors including Actuarial Valuation software changes, demographic changes, and benefit payment experience compared to expectation. Key demographic changes were discussed in the *Demographic Data* section of this report.

VALUATION OF FUND ASSETS

Market Value of Assets
Market Value of Assets (Gain)/Loss
Development of the Actuarial Value of Assets
Actuarial Value of Assets (Gain)/Loss
Historical Asset Performance

MARKET VALUE OF ASSETS

Statement of Assets

	Prior Valuation	Current Valuation
Cash and Cash Equivalents	$ 831,818	$ 390,809
Money Market	562,104	369,771
Illinois Funds	-	251,743
Fixed Income	12,014,718	12,175,538
Stock Equities	1,919,187	2,738,964
Mutual Funds	17,962,632	27,909,654
Receivables (Net of Payables)	91,642	86,402
Total Market Value of Assets	$ 33,382,101	$ 43,922,881

The Total Market Value of Assets has Increased by Approximately $10,540,000 from the Prior Valuation.

Statement of Changes in Assets

Total Market Value of Assets - Prior Valuation	$ 33,382,101
Plus - Employer Contributions	2,068,000
Plus - Member Contributions	429,150
Plus - Return on Investments	9,630,620
Less - Benefit Payments and Refunds	(1,555,055)
Less - Other Expenses	(31,935)
Total Market Value of Assets - Current Valuation	$ 43,922,881

The Rate of Return on Investments on a Market Value of Assets Basis for the Fund was Approximately 28.35% Net of Administrative Expense.

The Rate of Return on Investments shown above has been determined as the Return on Investments from the Statement of Changes in Assets, as a percent of the average of the prior and current Market Value of Assets. The Rate of Return on Investments is net of Other Expenses, and has been excluded from the Total Market Value of Assets at the end of the Fiscal Year for this calculation.

MARKET VALUE OF ASSETS (GAIN)/LOSS

Current Year (Gain)/Loss on Market Value of Assets

Total Market Value of Assets - Prior Valuation	$ 33,382,101
Employer and Member Contributions	2,497,150
Benefit Payments and Refunds	(1,555,055)
Expected Return on Investments	2,285,088
Expected Total Market Value of Assets - Current Valuation	36,609,284
Actual Total Market Value of Assets - Current Valuation	43,922,881
Current Market Value of Assets (Gain)/Loss	$ (7,313,597)
Expected Return on Investments	$ 2,285,088
Actual Return on Investments (Net of Expenses)	9,598,685
Current Market Value of Assets (Gain)/Loss	$ (7,313,597)

The Actual Return on Investments on a Market Value of Assets Basis was Greater than Expected for the Current Year.

The (Gain)/Loss on the current Market Value of Assets has been determined based on the Expected Rate of Return on Investments as shown in the *Actuarial Assumptions* section of this report.

Development of the Actuarial Value of Assets

Total Market Value of Assets - Current Valuation			$ 43,922,881
Adjustment for Prior (Gains)/Losses			
		Full Amount	Deferral
	FYE 2020	$ (7,313,597)	(5,850,878)
	FYE 2019	1,641,374	984,824
	FYE 2018	(119,471)	(47,788)
	FYE 2017	101,310	20,262
	Total Deferred (Gain)/Loss		(4,893,580)
Initial Actuarial Value of Assets - Current Valuation			$ 39,029,301
Less Contributions for the Current Year and Interest			-
Adjustment for the Corridor			501,292
Total Actuarial Value of Assets - Current Valuation			$ 39,530,593

The Actuarial Value of Assets is Equal to the Market Value of Assets with Unanticipated (Gains)/Losses Recognized Over 5 Years. The Actuarial Value of Assets is 90.00% of the Market Value of Assets.

In the current valuation, we have recognized approximately $500,000 in additional asset gains from the past five years in order to keep the Actuarial Value of Assets within 10% of the Market Value of Assets.

Actuarial Value of Assets (Gain)/Loss

Total Actuarial Value of Assets - Prior Valuation	$ 34,561,373
Plus - Employer Contributions	2,068,000
Plus - Member Contributions	429,150
Plus - Return on Investments	4,059,060
Less - Benefit Payments and Refund	(1,555,055)
Less - Other Expenses	(31,935)
Total Actuarial Value of Assets - Current Valuation	$ 39,530,593

The Rate of Return on Investments on an Actuarial Value of Assets Basis for the Fund was Approximately 11.50% Net of Administrative Expense.

The Actuarial Value of Assets incorporates portions of gains and losses over multiple years.

Historical Asset Performance

The chart below shows the historical Rates of Return on Investments for both Market Value of Assets and Actuarial Value of Assets.

	Market Value of Assets	Actuarial Value of Assets
FYE 2021	28.35%	11.50%
FYE 2020	1.67%	5.07%
FYE 2019	7.16%	5.75%
FYE 2018	6.36%	5.56%
FYE 2017	8.99%	5.44%
FYE 2016	(0.44%)	4.89%

The historical Rates of Return on Investments shown above were calculated based on the annual Return on Investments, as a percentage of the average value of the assets for the year.

For purposes of determining the average value of assets for the year, the ending Market Value of Assets has been adjusted to net out to the portion related to the Return on Investments themselves. All other cash flows are included.

For purposes of determining the annual Return on Investments we have adjusted the figures shown on the preceding pages. The figures shown on the preceding pages are net of Investment Expenses. We have made an additional adjustment to net out Administrative Expenses. Netting out Administrative Expenses allows us to capture returns for the year that can be used to make benefit payments as part of the ongoing actuarial process.

The adjustments we made are for actuarial reporting purposes only. By netting out Administrative Expenses and capturing Return on Investments that are available to pay benefits, it provides us a comparison to the Expected Rate of Return on Investments, but does not provide a figure that would be consistent with the rates of return that are determined by other parties. Therefore, this calculated Return on Investments should not be used to analyze investment performance of the Fund or the performance of the investment professionals.

<u>Expected Rate of Return on Investments Assumption</u>

The Expected Rate of Return on Investments for this valuation is 6.75%. Lauterbach & Amen, LLP does not provide investment advice. We look at a variety of factors when reviewing the Expected Rate of Return on Investments assumption selected by the Board. These factors include: historical Rates of Return on Investments, capital market projections performed by the Fund's investment advisors, the Fund's investment policy, capital market forward-looking benchmark expected returns by independent investment companies, rates used by comparable pension systems, and other factors identified in the Actuarial Standards of Practice.

Generally speaking, the ideal assumption for Expected Rate of Return on Investments is one that has a 50% chance of being met over the long-term. If actual returns going forward come in less than expected, the pension system risks deferring contributions to the future that should be made today, and creating additional contribution volatility. Reducing the Expected Rate of Return on Investments by 25 basis points produces a Recommended Contribution that is 12.96% higher than currently shown.

"Investment Risk" is the potential that actual Return on Investments will be different from what is expected. The selected Expected Rate of Return on Investments assumption is chosen to be a long-term assumption, producing a return that, on average, would produce a stable rate of return over a long-term horizon. Actual asset returns in the short-term may deviate from this long-term assumption due to current market conditions. Furthermore, establishing the Expected Rate of Return on Investments assumption may be dependent on the Illinois State Statutes pertaining to the limitations on types of investments Plan Sponsors may use. If the actual annual rates of return are less than the Expected Rate of Return on Investments, actuarial losses will be produced, thus increasing the Plan's Unfunded Liability and, subsequently, future Recommended Contributions.

"Asset/Liability Mismatch" risk is a similar concept as Investment Risk, as it relates to setting the Expected Rate of Return on Investments assumption compared to the actual Return on Investments achieved. The Interest Rate used to discount future Plan liabilities is set equal to the Expected Rate of Return on Investments. It is expected that the selected Interest Rate be a rate that is reasonably expected to be achieved over the long-term. To the extent that the selected Interest Rate to value Plan liabilities is unreasonable, or significantly different than the actual Return on Investments earned over an extended period of time, additional Interest Rate risk is created. For example, determining Plan liabilities at an Interest Rate higher than what is expected to be achieved through investment returns results in Unfunded Liability that is not a true representation of the Plan's condition and Percent Funded. As a result, the Actuarial Accrued Liability determined is an amount smaller than the liability that would be produced with an Interest Rate more indicative of future Expected Rate of Return on Investments. Therefore, the Recommended Contributions under the established Funding Policy may not be sufficient to appropriately meet the true pension obligations.

RECOMMENDED CONTRIBUTION DETAIL

ACTUARIAL ACCRUED LIABILITY

	Prior Valuation	Current Valuation
Active Members	$ 23,956,714	$ 20,928,242
Inactive Members		
Terminated Members*	887,774	1,997,678
Retired Members	22,259,339	26,725,531
Disabled Members	3,030,328	3,453,203
Other Beneficiaries	-	-
Total Inactive Members	26,177,441	32,176,412
Total Actuarial Accrued Liability	$ 50,134,155	$ 53,104,654

The Total Actuarial Accrued Liability has Increased by Approximately $2,970,000 from the Prior Valuation.

*Terminated Members Actuarial Accrued Liability for the current valuation includes non-vested terminated Members entitled to a refund of Employee Contributions that was not included in the prior valuation.

FUNDED STATUS

	Prior Valuation	Current Valuation
Total Actuarial Accrued Liability	$ 50,134,155	$ 53,104,654
Total Actuarial Value of Assets	34,561,373	39,530,593
Unfunded Actuarial Accrued Liability	$ 15,572,782	$ 13,574,061
Total Market Value of Assets	$ 33,382,101	$ 43,922,881
Percent Funded		
Actuarial Value of Assets	68.94%	74.44%
Market Value of Assets	66.59%	82.71%

The Percent Funded as of the Actuarial Valuation Date is Subject to Volatility on Assets and Liability in the Short-Term.

RECOMMENDED CONTRIBUTION DETAIL

Development of the Employer Normal Cost

	Prior Valuation	Current Valuation
Total Normal Cost	$ 1,115,148	$ 1,039,773
Estimated Member Contributions	(441,496)	(418,380)
Employer Normal Cost	$ 673,652	$ 621,393

At a 100% Funding Level, the Normal Cost Contribution is Still Required.

Normal Cost as a Percentage of Expected Payroll

	Prior Valuation	Current Valuation
Expected Payroll	$ 4,455,051	$ 4,285,133
Member Normal Cost Rate	9.910%	9.910%
Employer Normal Cost Rate	15.12%	14.35%
Total Normal Cost Rate	25.03%	24.26%

Ideally, the Employer Normal Cost Rate will Remain Stable.

Recommended Contribution Breakdown

	Prior Valuation	Current Valuation
Employer Normal Cost*	$ 719,124	$ 663,337
Amortization of Unfunded Accrued Liability/(Surplus)	1,559,932	1,472,147
Recommended Contribution	$ 2,279,056	$ 2,135,484

The Recommended Contribution has Decreased by 6.30% from the Prior Valuation.

*Employer Normal Cost Contribution includes interest through the end of the Fiscal Year.

Schedule of Amortization – Unfunded Actuarial Accrued Liability

Below is the schedule of remaining amortization balances for the Unfunded Liability.

Unfunded Liability Base	Initial Balance	Date Established	Current Balance	Years Remaining	Payment
Investment (Gain)/Loss	$ (1,713,256)	4/30/2021	$ (1,713,256)	15	$ (154,754)
Actuarial (Gain)/Loss	223,736	4/30/2021	223,736	15	20,209
Contribution Experience	(430)	4/30/2021	(430)	15	(39)
Investment (Gain)/Loss	492,433	4/30/2020	481,192	14	45,815
Actuarial (Gain)/Loss	194,952	4/30/2020	190,502	14	18,138
Contribution Experience	(463)	4/30/2020	(452)	14	(43)
Assumption Changes	(32,162)	4/30/2020	(31,428)	14	(2,992)
Plan Changes	212,233	4/30/2020	207,389	14	19,746
Investment (Gain)/Loss	242,080	4/30/2019	229,998	13	23,198
Actuarial (Gain)/Loss	63,697	4/30/2019	60,516	13	6,104
Contribution Experience	(9,282)	4/30/2019	(8,819)	13	(890)
Investment (Gain)/Loss	320,616	4/30/2018	294,455	12	31,646
Contribution Experience	(992)	4/30/2018	(911)	12	(98)
Actuarial (Gain)/Loss	(325,744)	4/30/2018	(299,166)	12	(32,152)
Initial Unfunded Liability	$ 15,466,613	4/30/2017	$ 13,940,735	12	$ 1,498,259
Total	**$ 15,134,031**		**$ 13,574,061**		**$ 1,472,147**

The Actuarial (Gain)/Loss can be attributable to several factors including Actuarial Valuation software changes, demographic changes, Employer Contribution timing, Member Contribution experience, benefit payment experience, and salary increase experience compared to expectation.

The equivalent single amortization period based on the layered amortization of Unfunded Liability is 11.86 years for the current valuation.

ACTUARIAL METHODS – RECOMMENDED CONTRIBUTION

Actuarial Valuation Date	May 1, 2021
Data Collection Date	April 30, 2021
Actuarial Cost Method	Entry Age Normal (Level % Pay)
Amortization Method	Level % Pay (Closed)
Amortization Target	Layered - See Previous Page
Asset Valuation Method	5-Year Smoothed Market Value

The contributions and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census data furnished, using the Actuarial Cost Method described. The Actuarial Cost and Amortization Methods allocate the projected obligations of the Plan over the working lifetimes of the Plan Members.

The Recommended Contribution amount shown in this report is based on the methods summarized above. The *Actuarial Funding Policies* section of this report includes a more detailed description of the Actuarial Funding Methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way contributions are made towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Statutory Minimum Contribution
Funded Status – Statutory Minimum
Actuarial Methods – Illinois Statutory Minimum Contribution

STATUTORY MINIMUM CONTRIBUTION

	Prior Valuation	Current Valuation
Statutory Minimum Contribution	$1,420,354	$1,384,759
Expected Payroll	$4,455,051	$4,285,133
Statutory Minimum Contribution as a Percent of Expected Payroll	31.88%	32.32%

The Statutory Minimum Contribution has Decreased by $35,595 from the Prior Valuation.

FUNDED STATUS – STATUTORY MINIMUM

	Prior Valuation	Current Valuation
Normal Cost	$1,256,192	$1,115,950
Market Value of Assets	$33,382,101	$43,922,881
Actuarial Value of Assets	$34,561,373	$39,530,593
Actuarial Accrued Liability	$46,737,569	$53,275,113
Unfunded Actuarial Accrued Liability/(Surplus)	$12,176,196	$13,744,520
Percent Funded		
Actuarial Value of Assets	73.95%	74.20%
Market Value of Assets	71.42%	82.45%

The Statutory Minimum Percent Funded has Increased by 0.25% on an Actuarial Value of Assets Basis.

ILLINOIS STATUTORY MINIMUM CONTRIBUTION

The Statutory Minimum Contribution is based on Actuarial Funding Methods and funding parameters in the Illinois State Statutes for pension funding. The resulting contribution is lower than the Recommended Contribution for the current year. The lower contribution amount is not recommended because it represents only a deferral of contributions when compared to the Recommended Contribution method.

Actuarial Funding Methods for pensions are best applied to provide a balance between the long-term goals of a variety of stakeholders:

1. Members – the Members are interested in benefit security and having the funds available to pay benefits when retired

2. Employers – cost control and cost stability over the long-term

3. Taxpayers – paying for the services they are receiving from active Members

The Statutory Minimum Contribution methods are not intended to provide a better system in any of the above categories long-term. The parameters are not recommended for a long-term funding strategy.

The Statutory Minimum methods put into place in 2011 were intended to provide short-term budget relief for Employer Contributions. An Employer using the Statutory Minimum parameters for current funding should view the contributions as short-term relief. Our recommendation in this situation is for a Pension Fund and an Employer to work towards a long-term funding strategy that better achieves the long-term funding goals, over a period that does not exceed 3-5 years.

The Securities and Exchange Commission in 2013 used the phrase "Statutory Underfunding" to describe situations where contributions appear to be more manageable in the short-term, but set up future Recommended Contributions that are less likely to be manageable.

ACTUARIAL METHODS – ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Actuarial Valuation Date	May 1, 2021
Data Collection Date	April 30, 2021
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level % Pay (Closed)
Amortization Target	90% Funded Over 19 Years
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census data furnished, using the Actuarial Cost Method described. The Actuarial Cost and Amortization methods allocate the projected obligations of the Plan over the working lifetimes of the Plan Members.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way contributions are made towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

ACTUARIAL VALUATION DATA

Active Members
Inactive Members
Summary of Monthly Benefit Payments

Active Members

	Prior Valuation	Current Valuation
Tier I	32	29
Tier II	15	15
Total Active Members	47	44
Total Payroll	$ 4,389,213	$ 4,221,806

Inactive Members

	Prior Valuation	Current Valuation
Terminated Members*	2	6
Retired Members	16	18
Disabled Members	4	4
Other Beneficiaries	0	0
Total Inactive Members	22	28

*Terminated Members for the current valuation includes non-vested terminated Members entitled to a refund of Employee Contributions who were not included in the prior valuation.

Summary Of Monthly Benefit Payments

	Prior Valuation	Current Valuation
Retired Members	$ 104,847	$ 119,989
Disabled Members	13,440	16,334
Other Beneficiaries	-	-
Total Inactive Members	$ 118,286	$ 136,323

ACTUARIAL FUNDING POLICIES

Actuarial Cost Method
Financing Unfunded Actuarial Accrued Liability
Actuarial Value of Assets

ACTUARIAL COST METHOD

The Actuarial Cost Method allocates the projected obligations of the Plan over the working lifetimes of the Plan Members.

In accordance with the Pension Fund's Funding Policy the Actuarial Cost Method for the Recommended Contribution basis is Entry Age Normal (Level Percent of Pay). The Entry Age Normal Cost Method is a method under which the Actuarial Present Value of the projected benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age. The portion of this Actuarial Present Value allocated to a valuation year is called Normal Cost. The portion of the Actuarial Present Value not provided at an Actuarial Valuation Date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

The Entry Age Normal method attempts to create a level cost pattern. In contrast to other Actuarial Cost Methods which inherently lead to uneven or less predictable cost patterns, the Entry Age Normal method is generally understood to be less risky in terms of contribution stability from year to year.

The Conference of Consulting Actuaries Public Plans Community produced a "white paper" detailing Funding Policy model practices for public sector pension plans. Under the Level Cost Actuarial Methodology ("LCAM"), one of the principal elements to a Funding Policy is the Actuarial Cost Method. When deciding which Actuarial Cost Method to use, several objectives may be considered, such as the following:

- Each Member's benefit should be funded under a reasonable allocation method by the expected retirement date
- Pay-related benefit costs should reflect anticipated pay at retirement
- The expected cost of each year of service (i.e. Normal Cost) for each active Member should be reasonably related to the expected cost of that Member's benefit
- The Member's Normal Cost should emerge as a level percent of Member compensation
- No gains or losses should occur if all assumptions are met.

Following these criteria, the use of the Entry Age Normal Cost Method (Level Percent of Pay) is a model practice.

FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITY

The Unfunded Actuarial Accrued Liability may be amortized over a period either in level dollar amounts or as a level percentage of payroll.

When amortizing the Unfunded Actuarial Accrued Liability as a level percentage of payroll, additional risk is incurred since the amortization payments in the early years of the payment period may not be large enough to cover the interest accrued on the existing Unfunded Liability. As a result, the Unfunded

Liability may increase initially, before the amortization payments grow large enough to cover all interest accruals. Generally speaking, the Plan Sponsor will be required to contribute a larger total contribution amount over the course of the funding period under a level percentage of payroll basis as compared to a level dollar payroll schedule.

The Government Finance Officers Association notes that best practices in public pension finance include utilizing amortization periods that do not exceed 20 years. Longer amortization periods elevate the risk of failing to reduce any Unfunded Liability. For example, when the amortization payment in full only covers interest on the Unfunded Liability, but does not reduce the existing Unfunded Liability, the required contribution will increase in future years.

A second principal element under the Level Cost Actuarial Methodology described above is to establish an Amortization Policy that determines the length of time and the structure of the increase or decrease in contributions required to systematically fund the Unfunded Actuarial Accrued Liability. When deciding on the Amortization Policy, several objectives may be considered, such as the following:

- Variations in the source of liability changes (i.e. gains or losses, Plan changes, assumption changes) should be funded over periods consistent with an appropriate balance between the policy objectives of demographic matching and volatility management
- The cost changes in Unfunded Actuarial Accrued Liability should emerge as a level percentage of Member compensation

The LCAM model practices for the Amortization Policy include the following:

- Layered fixed period amortization by source
- Level percent of pay amortization
- An amortization period ranging from 15-20 years for experience gains or losses
- An amortization period of 15-25 years for assumption changes

In accordance with the Pension Fund's Funding Policy for the Recommended Contribution, the Unfunded Actuarial Accrued Liability is amortized by level percent of payroll contributions to a 100% funding target over a layered amortization period of 15 years. See the *Actuarial Methods – Recommended Contribution* section of this report for more detail.

The equivalent single amortization period based on the layered amortization of Unfunded Liability is 11.86 years for the current valuation.

We believe that the amortization period is appropriate for the purposes of this valuation.

Actuarial Value of Assets

The Pension Fund is an ongoing plan. The Employer wishes to smooth the effect of volatility in the Market Value of Assets on the annual contribution. Therefore, the Actuarial Value of Assets is equal to the Market Value of Assets with unanticipated gains/losses recognized over a five-year period.

The Asset Valuation Method is intended to create an Actuarial Value of Assets that remains reasonable in relation to the Market Value of Assets over time. The method produces results that can fall either above or below the Market Value of Assets. The period of recognition is short.

It is intended that the period of recognition is short enough to keep the Actuarial Value of Assets within a decent range of the Market Value of Assets. In the event that the Actuarial Value of Assets exceeds or falls below a 10% corridor of the Market Value of Assets, the additional gain or loss will be recognized immediately.

ACTUARIAL ASSUMPTIONS

Nature of Actuarial Calculations
Actuarial Assumptions in the Valuation Process
Assessment of Risk Exposures
Limitations of Risk Analysis
Assessment and Use of Actuarial Models
Actuarial Assumptions Utilized

NATURE OF ACTUARIAL CALCULATIONS

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events. Certain Plan Provisions may be approximated or deemed immaterial, and, therefore, are not valued. Assumptions may be made about census data or other factors. Reasonable efforts were made in this valuation to ensure that significant items in the context of the Actuarial Accrued Liability or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in the calculations. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.

A range of results different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The contributions and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census data furnished, using the Actuarial Cost Method described in the *Actuarial Funding Policies* section of this report.

The principal areas of financial risk which require assumptions about future experience are:

- Expected Rate of Return on Investments
- Patterns of Pay Increases for Members
- Rates of Mortality Among Active and Inactive Members
- Rates of Termination Among Active Members
- Rates of Disability Among Active Members
- Age Patterns of Actual Retirements

Actual experience of the Pension Fund will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed Recommended Contribution.

Details behind the selection of the actuarial assumptions can be found in the Actuarial Assumption Summary document provided to the client upon request. The client has reviewed and approved the assumptions as a reasonable expectation of the future anticipated experience under the Plan.

Assessment of Risk Exposures

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations). In addition, Actuarial Standards of Practice require that the Actuary minimally perform a qualitative assessment of key financial and demographic risks as part of the risk assessment process with each annual Actuarial Valuation. The risk assessments we perform include, but are not limited to, the following:

- Periodic demographic experience studies every 3 to 5 years to confirm the ongoing appropriateness of actuarial assumptions
- Highlight the impact of demographic experience over the past year, as well as other sources of change and volatility in the *Actuarial Recommended Contribution – Reconciliation* section of this report
- Detail year-over-year changes in contribution levels, assets, liabilities, and Funded Status in the *Recommended Contribution* and *Funded Status* sections in the *Management Summary* section of this report
- Review any material changes in the census as summarized in the *Actuarial Valuation Data* section of this report
- Provide and discuss the Actuarial Assumption Summary document highlighting the rationale for each key assumption chosen by the Board
- Identify potential Cash Flow Risk by highlighting expected benefit payments over the next 5-year and 10-year periods in the *Asset Growth* section in the *Management Summary* section of this report
- Describe the impact of any assumption, method, or policy change in the *Management Summary* section of this report
- Utilize supplemental information, such as the GASB Discount Rate sensitivity disclosures to understand, for example, what impact an alternative Expected Rate of Return on Investments assumption might have on the estimation of Actuarial Accrued Liability and Funded Status
- Utilize supplemental information, such as the GASB solvency test, to better understand the Cash Flow Risk and long-term sustainability of the Plan.

Limitations of Risk Analysis

Since future experience may never be precisely as assumed, the process of selecting funding methods and actuarial assumptions may inherently create risk and volatility of results. A more detailed evaluation of the above risk exposures is beyond the scope and nature of the annual Actuarial Valuation process. For example, scenario tests, sensitivity tests, stress tests, and/or stochastic modeling for multi-year projections to assess the impact of alternative assumptions and methods, or modeling future experience different from the assumptions in these results, are not included in this Actuarial Valuation.

The Algonquin Police Pension Fund and/or the Village of Algonquin, Illinois should contact the Actuary if they desire a more detailed assessment of any of these forward-looking risk exposures.

ASSESSMENT AND USE OF ACTUARIAL MODELS

Actuarial Valuations rely upon the use of actuarial modeling software to predict the occurrence of future events, which include specific demographic and financial potential outcomes. Actuarial assumptions are established to provide a guideline to use for such modeling.

- The model used in this Actuarial Valuation is intended to determine the Recommended Contribution, under the selected Funding Policy. The actuarial assumptions used were developed with this goal in mind.
- There are no known material limitations or inconsistencies among the actuarial assumptions or methods.
- The output from the model is reasonable based on the individual actuarial assumptions and based on the actuarial assumptions in the aggregate.
- The actuarial software used to calculate plan liabilities has been purchased from an outside vendor. We have performed thorough testing of the software, including review of sample participants, to ensure the intended purpose of the model, the operation of the model, sensitivities and dependencies, and strengths and limitations of the model are sufficient for this purpose.
- Census data and financial information have been provided by client professionals, financial advisors, and/or auditors, who are known to be experts in their respective fields. We rely on the fact that the information provided by these experts has been given for the intended purpose of this Actuarial Valuation.
- Where applicable, certain actuarial assumptions and Funding Policy may be required as prescribed by law. In such instances, we have followed legal guidance to ensure conformity.
- The Expected Rate of Return on Investments assumption has been chosen using input from several sources; including, but not limited to: client professionals, financial advisors, auditors, and other capital market outlooks. We have relied on the information provided, in the aggregate, to settle on the selected Expected Rate of Return on Investments assumption.

As stated in the *Limitations of Risk Analysis* section, future experience may never be precisely as assumed. As a result, the funding methods and actuarial assumptions used in the model may create volatility in the results when compared year after year. A more detailed evaluation of this volatility is beyond the scope and nature of the annual Actuarial Valuation process. In such cases, additional scenario tests, sensitivity tests, stress tests, and/or stochastic modeling for multi-year projections to assess the impact of alternative assumptions and methods, or modeling future experience different from the assumptions in these results, may be performed to determine a range of reasonable results.

Actuarial Assumptions Utilized

Expected Rate of Return on Investments 6.75% Net of Administrative Expense

CPI-U 2.25%

Total Payroll Increases 3.00%

Individual Pay Increases* 3.75% - 21.26%

Individual pay increases include a long-term average increase for inflation, average annual increases for promotions, and any additional increases for a step program. Sample rates are as follows:

Service	Rate	Service	Rate
0	7.80%	8	3.75%
1	8.14%	9	3.75%
2	7.86%	10	3.75%
3	7.78%	15	3.75%
4	7.98%	20	3.75%
5	7.97%	25	3.75%
6	7.98%	30	3.75%
7	21.26%	35	3.75%

*Individual pay increases for active Members hired at age 40 or older are assumed annual increases at the ultimate rate reduced by 50 basis points, without adjustments in early service years.

Retirement Rates

100% of the L&A Assumption Study for Police 2020 Cap Age 65. Sample rates are as follows:

Age	Rate	Age	Rate
50	11.00%	58	16.25%
51	11.55%	59	16.25%
52	12.13%	60	16.25%
53	12.73%	61	16.25%
54	13.37%	62	18.00%
55	14.04%	63	20.00%
56	14.74%	64	20.00%
57	15.48%	65	100.00%

Termination Rates

100% of the L&A Assumption Study for Police 2020. Sample rates are as follows:

Age	Rate	Age	Rate
25	8.00%	40	2.17%
30	3.40%	45	1.56%
35	2.79%	50	0.46%

Disability Rates

100% of the L&A Assumption Study for Police 2020. Sample rates are as follows:

Age	Rate	Age	Rate
25	0.00%	40	0.38%
30	0.06%	45	0.53%
35	0.18%	50	0.48%

65% of active Members who become disabled are assumed to be in the Line of Duty.

Mortality Rates

Active Mortality follows the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study. Mortality improvement uses MP-2019 Improvement Rates applied on a fully generational basis.

50% of active Member deaths are assumed to be in the Line of Duty.

Retiree Mortality follows the L&A Assumption Study for Police 2020. These rates are experience weighted with the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study improved to 2017 using MP-2019 Improvement Rates. These rates are then improved fully generationally using MP-2019 Improvement Rates.

Disabled Mortality follows the Sex Distinct Raw Rates as developed in the PubS-2010 Study for disabled participants. Mortality improvement uses MP-2019 Improvement Rates applied on a fully generational basis.

Spouse Mortality follows the Sex Distinct Raw Rates as developed in the PubS-2010(A) Study for contingent survivors. For all rates not provided there (ages 45 and younger) the PubG-2010 Study for general employees was used. Mortality improvement uses MP-2019 Improvement Rates applied on a fully generational basis.

Marital Assumptions

Active Members: 80% of active Members are assumed to be married. Female spouses are assumed to be 3 years younger than male spouses.

Retiree and Disabled Members: Actual spousal data was utilized for retiree and disabled Members.

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Establishment of the Fund
Administration
Member Contributions
Regular Retirement Pension Benefit
Early Retirement Pension Benefit
Surviving Spouse Benefit
Termination Benefit – Vested
Disability Benefit

ESTABLISHMENT OF THE FUND

The Police Pension Fund is established and administered as prescribed by "Article 3 – Police Pension Fund – Municipalities 500,000 and Under" of the Illinois Pension Code.

ADMINISTRATION

The Police Pension Fund is administered by a Board of Trustees whose duties are to manage the Pension Fund, determine applications for pensions, authorize payment of pensions, establish rules, pay expenses, invest assets, and keep records.

MEMBER CONTRIBUTIONS

Members contribute 9.910% of pensionable salary.

REGULAR RETIREMENT PENSION BENEFIT

<u>Hired Prior to January 1, 2011</u>

Eligibility: Age 50 with at least 20 years of creditable service.

Benefit: 50% of final salary for the first 20 years of service, plus an additional 2.5% of final salary for each year of service beyond 20 years of service, and not to exceed 75% of final salary. "Final salary" is based on the police officer's pensionable salary attached to rank held on the last day of service, unless the pensionable salary was greater at some point within the year prior to the last day of service. If so, the pensionable salary is averaged over the last 12 months.

Annual Increase in Benefit: A police officer is entitled to receive an initial increase equal to 1/12 of 3% of the original monthly benefit for each full month that has passed since the pension began. The initial increase date will be the latter of the first day of the month after the pensioner turns age 55 or the first day of the month after the benefit date anniversary. Subsequent increases of 3% of the current monthly benefit will be granted every January 1st thereafter.

REGULAR RETIREMENT PENSION BENEFIT - CONTINUED

Hired on or After January 1, 2011

Eligibility: Age 55 with at least 10 years of creditable service.

Benefit: 2.5% of final average salary for each year of service, and not to exceed 75% of final average salary. "Final average salary" is determined by dividing the total pensionable salary during 48 consecutive months of service within the last 60 months of service in which total pensionable salary was the highest, by the number of months of service in that period (or by dividing the total pensionable salary during 96 consecutive months of service within the last 120 months of service in which total pensionable salary was the highest, by the number of months of service in that period, if greater). Annual salary for this purpose will not exceed the salary cap, indexed by the lesser of 3% or the CPI-U for the 12 months ending with the September preceding each November 1st. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the latter of the January 1st after the pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases will be granted every January 1st thereafter. The initial increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1st.

EARLY RETIREMENT PENSION BENEFIT

Hired Prior to January 1, 2011

None.

Hired on or After January 1, 2011

Eligibility: Age 50 with at least 10 years of creditable service.

Benefit: The regular retirement pension benefit reduced by ½ of 1% for each month that the police officer's age is between 50 and 55.

Annual Increase in Benefit: The initial increase date will be the latter of the January 1st after the pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases will be granted every January 1st thereafter. The initial increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1st.

SURVIVING SPOUSE BENEFIT

Hired Prior to January 1, 2011

Eligibility: Married to an active police officer with at least 8 years of creditable service, a disabled pensioner at the time of death, or a retired pensioner on the last day of service.

Active Line of Duty Death Benefit: An eligible surviving spouse is entitled to receive 100% of the police officer's final pensionable salary attached to rank held on the last day of service.

Non-Duty Death Benefit:

Disabled or Retired Pensioner: An eligible surviving spouse is entitled to receive the pensioner's benefit at the time of death.

Active Member with 20+ Years of Service: An eligible surviving spouse is entitled to the police officer's eligible benefit at the time of death.

Active Member with 10-20 Years of Service: An eligible surviving spouse is entitled to receive 50% of the police officer's pensionable salary attached to rank held on the last day of service, unless the pensionable salary was greater at some point within the year prior to the last day of service. If so, the pensionable salary is averaged over the last 12 months.

Annual Increase in Benefit: None.

Hired on or After January 1, 2011

Eligibility: Married to an active police officer with at least 8 years of creditable service, a disabled pensioner at the time of death, or a retired pensioner on the last day of service.

Active Line of Duty Death Benefit: An eligible surviving spouse is entitled to receive 100% of the police officer's final pensionable salary attached to rank held on the last day of service.

Non-Duty Death Benefit:

Disabled or Retired Pensioner, Active Member with 20+ Years of Service, and Active Member with 10-20 Years of service: An eligible surviving spouse is entitled to receive the greater of 66⅔% of the police officer's earned pension benefit at the time of death or 54% of the police officer's monthly salary at the time of death.

Annual Increase in Benefit: The initial increase date will be the January 1st after the surviving spouse turns age 60. Subsequent increases will be granted every January 1st thereafter. The initial increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1st.

TERMINATION BENEFIT – VESTED

Hired Prior to January 1, 2011

Eligibility: Age 60 with at least 8 but less than 20 years of creditable service.

Benefit: 2.5% of final salary for each year of service. "Final salary" is based on the police officer's pensionable salary attached to rank held on the last day of service, unless the pensionable salary was greater at some point within the year prior to the last day of service. If so, the pensionable salary is averaged over the last 12 months.

Annual Increase in Benefit: A police officer is entitled to receive an initial increase equal to 1/12 of 3% of the original monthly benefit for each full month that has passed since the pension began. The initial increase date will be the first day of the month after the benefit date anniversary. Subsequent increases of 3% of the current monthly benefit will be granted every January 1st thereafter.

Hired on or After January 1, 2011

None.

DISABILITY BENEFIT

Hired Prior to January 1, 2011

Eligibility: Duty or Non-Duty Disability or Occupational Disease Disability with at least 5 years of creditable service.

Benefit: For a duty disability or an occupational disease disability with at least 5 years of creditable service, a police officer is entitled to receive the greater of 65% of final salary or the regular retirement pension benefit at the time of disability. For a non-duty disability, a police officer is entitled to receive 50% of final salary. "Final salary" is based on the police officer's pensionable salary attached to rank held on the last day of service.

Annual Increase in Benefit: A police officer is entitled to receive an initial increase equal to 3% of the original monthly benefit for each full year that has passed since the pension began. The initial increase date will be the latter of the January 1st after following pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases of 3% of the original monthly benefit will be granted every January 1st thereafter.

Hired on or after January 1, 2011

Eligibility: Duty or Non-Duty Disability or Occupational Disease Disability with at least 5 years of creditable service.

Benefit: For a duty disability or an occupational disease disability with at least 5 years of creditable service, a police officer is entitled to receive the greater of 65% of final salary or the regular retirement pension benefit at the time of disability. For a non-duty disability, a police officer is entitled to receive 50% of final salary. "Final salary" is based on the police officer's pensionable salary attached to rank held on the last day of service.

Annual Increase in Benefit: A police officer is entitled to receive an initial increase equal to 3% of the original monthly benefit for each full year that has passed since the pension began. The initial increase date will be the latter of the January 1st after following pensioner turns age 60 or the January 1st after the benefit date anniversary. Subsequent increases of 3% of the original monthly benefit will be granted every January 1st thereafter.

GLOSSARY OF TERMS

Glossary of Terms

GLOSSARY OF TERMS

Actuarial Accrued Liability – The Actuarial Present Value of future benefits based on Members' service rendered to the Measurement Date using the selected Actuarial Cost Method. It is that portion of the Actuarial Present Value of Plan benefits and expenses allocated to prior years of employment. It is not provided for by future Normal Costs.

Actuarial Cost Method – The method used to allocate the projected obligations of the Plan over the working lifetimes of the Plan Members.

Actuarial Value of Assets – The value of the assets used in the determination of the Unfunded Actuarial Accrued Liability. The Actuarial Value of Assets is related to Market Value of Assets, with adjustments made to spread unanticipated gains and losses for a given year over a period of several years. Actuarial Value of Assets is generally equally likely to fall above or below the Market Value of Assets, and generally does not experience as much volatility over time as the Market Value of Assets.

Asset Valuation Method – A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an Asset Valuation Method is to provide for the long-term stability of Employer Contributions.

Funding Policy – A set of procedures for a Pension Fund that outlines the "best practices" for funding the pension benefits based on the goals of the Plan Sponsor. A Funding Policy discusses items such as assumptions, Actuarial Cost Method, assets, and other parameters that will best help the Plan Sponsor meet their goal of working in the best interest of the Plan Members.

Market Value of Assets – The value of the cash, bonds, securities, and other assets held in the pension trust as of the Measurement Date.

Normal Cost – The present value of future benefits earned by Members during the current Fiscal Year. It is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Unfunded Actuarial Accrued Liability – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability is amortized over a period either in level dollar amounts or as a level percentage of projected payroll.

Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

MEMORANDUM

TO: Village President and Board of Trustees

FROM: Stan W. Helgerson, President, Police Pension Fund

DATE: July 9, 2021

RE: 2021 Tax Levy Request

The Police Pension Fund Board is hereby requesting that the Village Board levy $2,135,484 for the Police Pension Fund. The amount was determined by an actuary that was jointly hired by the Village and the Pension Board.

Thank you for your consideration.

cc: Algonquin Police Pension Board

VILLAGE OF ALGONQUIN
GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: November 4, 2021

TO: Tim Schloneger, Village Manager

FROM: Michael Kumbera, Assistant Village Manager/Treasurer

SUBJECT: *2021 Property Tax Levy*

The attached resolution establishes the amount the Village is requesting for its 2021 property tax levy. State statutes require that the corporate authorities of the Village pass a resolution estimating the amount of tax to be levied not less than 20 days prior to the adoption of the final levy, which is scheduled to be presented at the December 7 Village Board meeting.

Background

For the 2020 tax levy year, the Village's portion of resident's tax bill was approximately 6.3 percent (with some minor variations depending on exact location of household). In FY 21/22, property taxes comprise 31 percent of the General Fund revenue, which includes the Road and Bridge tax levy, which is levied by the township level of government. The Village, a home-rule unit of government, is not subject to the Property Tax Extension Limitation Law (PTELL), however, the Village is required to comply with the "Truth in Taxation Law." The law places requirements on the Village in the adoption of the 2021 property tax levy if the proposed 2021 gross property tax levy is 105 percent greater than the 2020 net property tax extension. Property tax revenues are not used to support business-like activities that are accounted for in enterprise funds, such as the Village's Water and Sewer Utility.

Recommendation

The recommendation for the 2021 Tax Levy is $5,900,000. This is an increase of $88,000 from the 2020 tax levy. The details are shown in Exhibit A which is attached. As the proposed levy is 101.51 percent of last year's extensions, there is no requirement for a public hearing under the Truth in Taxation Statute. The recommendation does take into consideration several factors that will impact the FY 22/23 financial plan including:

- The actuarial contribution recommendation for the Algonquin Police Pension Fund which exceeds the statutory requirement with a 100 percent funding level by 2033.
- The proportion of state-shared revenues and their stability in the long-term.
- Operational and capital needs for the upcoming period.
- Growth in Equalized Assessed Valuation (EAV) from both property value appreciation and new construction.

Projected EAV

Based on preliminary data obtained from Kane and McHenry County, equalized assessed valuation in the Village is expected to increase for the sixth consecutive year. The estimate of EAV for 2021 is $1,036,250,000 which is 1.8% more than last year which illustrates appreciation of real estate values and new construction. The assessors in each county use a three year history of property values including sales experience in determining the reassessment or current valuation. Assessments generally lag behind current market pricing by 18 months. The estimated tax rate for 2021 would be 0.57 per $100 of EAV (refer to Exhibit A for details) which is equal to 2020. A draft resolution reflecting this data is also attached.

Requested Action

Please forward the proposed tax levy information to the Committee of the Whole for review and action.

Attachments

RESOLUTION 2021-R-

DETERMINING THE AMOUNT OF FUNDS TO BE LEVIED FOR THE 2021 TAX YEAR THROUGH REAL ESTATE TAXES FOR THE VILLAGE OF ALGONQUIN, KANE AND McHENRY COUNTIES, ILLINOIS

BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF ALGONQUIN, KANE AND McHENRY COUNTIES, ILLINOIS:

1. That it is determined that the amount of taxes to be levied by the Village of Algonquin, exclusive of election costs, is $5,900,000, which is less than 105 percent of the prior year's extension.
2. That the amount of taxes proposed to be levied is 101.51 percent of the prior year’s extension.
3. That the intent of the Village to levy less than 105 percent does not require an advertisement in the newspaper or a public hearing in accordance with the Truth in Taxation Law (35 ILCS 200/18-55 et seq.).

____
Debby Sosine, Village President

(SEAL)

Attest: ________________________________
Fred Martin, Village Clerk

EXHIBIT A

VILLAGE OF ALGONQUIN
PROPOSED REAL ESTATE TAX LEVY
2021 TAX LEVY

EQUALIZED ASSESSED VALUATION *	$1,036,250,000	(1.8% INCREASE)
PURPOSE	ESTIMATED RATE	PROPOSED LEVY
CORPORATE	0.000	$0
POLICE PENSION	0.220	2,280,000
SOCIAL SECURITY	0.040	412,000
IMRF	0.029	300,000
SCHOOL CROSSING GUARDS	0.000	0
LIABILITY INSURANCE	0.039	400,000
POLICE PROTECTION	0.234	2,420,000
ESDA	0.000	0
PARKS	0.008	88,000
	============	==============
TOTAL	0.569	5,900,000

** Estimated*

EXHIBIT B

VILLAGE OF ALGONQUIN
SCHEDULE OF PROPERTY TAX RATES & EAV

Tax Levy Year	Rate ($/$100)	Levy ($)	EAV ($)	% Change EAV
1988	0.600	$560,450	$110,909,000	-
1989	0.599	$693,900	$135,617,000	22.3%
1990	0.520	$870,250	$166,102,000	22.5%
1991	0.554	$1,099,915	$192,167,000	15.7%
1992	0.566	$1,154,155	$211,172,000	9.9%
1993	0.529	$1,344,234	$232,032,000	9.9%
1994	0.556	$1,439,688	$269,127,000	16.0%
1995	0.477	$1,677,581	$308,854,325	14.8%
1996	0.484	$1,841,828	$356,504,156	15.4%
1997	0.486	$1,873,385	$419,401,278	17.6%
1998	0.483	$2,098,213	$429,661,002	2.4%
1999	0.494	$2,280,130	$463,158,850	7.8%
2000	0.489	$2,350,739	$513,584,881	10.9%
2001	0.502	$2,870,821	$578,127,467	12.6%
2002	0.456	$3,031,293	$658,305,942	13.9%
2003	0.484	$3,613,946	$747,072,297	13.5%
2004	0.477	$3,975,083	$834,437,331	11.7%
2005	0.464	$4,392,662	$947,091,750	13.5%
2006	0.464	$4,829,500	$1,038,991,569	9.7%
2007	0.470	$5,242,000	$1,115,890,792	7.4%
2008	0.485	$5,601,000	$1,155,073,386	3.5%
2009	0.484	$5,601,000	$1,157,591,396	0.2%
2010	0.523	$5,601,000	$1,077,620,673	-6.9%
2011	0.564	$5,575,000	$981,280,749	-8.9%
2012	0.621	$5,481,000	$887,200,696	-9.6%
2013	0.678	$5,481,000	$805,011,458	-9.3%
2014	0.705	$5,481,000	$777,811,422	-3.4%
2015	0.716	$5,731,000	$800,571,395	2.9%
2016	0.657	$5,600,000	$852,365,740	6.5%
2017	0.622	$5,600,000	$900,634,801	5.7%
2018	0.588	$5,600,000	$951,587,593	5.7%
2019	0.570	$5,600,000	$982,740,828	3.3%
2020	0.571	$5,812,000	$1,018,422,053	3.6%
2021	0.569	$5,900,000	$1,036,250,000	1.8%

VILLAGE OF ALGONQUIN
GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: November 1, 2021

TO: Tim Schloneger, Village Manager

FROM: Michael Kumbera, Assistant Village Manager

SUBJECT: *T3 Tower 2 LLC Site Agreement Amendment*

In June 2002, the Village entered into a site agreement with Voicestream GSM I Operating Company, LLC (currently d/b/a T-Mobile/Crown Castle) to lease 820 square feet of ground space at the Algonquin Cemetery. This agreement was subsequently amended in 2016 (2016-R-68) to extend the term of the agreement.

Currently, there are two (2) entities who wish to lease ground space at this site to install equipment on the monopole tower (Dish Network and Nicor). To avoid further encroachment on the cemetery itself, the Village has negotiated with Crown Castle to permit them to sublease to Dish Network and Nicor within the existing compound for additional consideration to the Village. A brief summary of terms of this amendment include:

- Additional annual rent of $4,380 (proportionate to current year rent)
- Five (5) year extension of term
- One-time signing bonus of $5,000

Attached is a copy of the Second Amendment to the Site Agreement that incorporates these terms. The agreement has been reviewed by the Village Attorney's Office and is proper form.

<u>Recommendation</u>
Staff recommends that the Committee of the Whole forward this to the Village Board for approval by Resolution at their meeting on November 16.

SECOND AMENDMENT TO
SITE AGREEMENT

THIS SECOND AMENDMENT TO SITE AGREEMENT (the "Second Amendment") is made effective this ____ day of ______________, 2021 ("Effective Date"), by and between VILLAGE OF ALGONQUIN, an Illinois municipality (hereinafter referred to as "Lessor") and T3 TOWER 2 LLC, a Delaware limited liability company, by and through its Attorney In Fact, CCTMO LLC, a Delaware limited liability company (hereinafter referred to as "Lessee").

RECITALS

WHEREAS, Lessor and Voicestream GSM I Operating Company, LLC ("Original Lessee") entered into a Site Agreement dated June 4, 2002 (the "Original Agreement") whereby Original Lessee leased certain real property, together with access and utility easements, located in McHenry County, Illinois from Lessor (the "Premises"), all located within certain real property owned by Lessor ("Lessor's Property"); and

WHEREAS, the Original Agreement was amended by that certain First Amendment to Site Agreement dated December 6, 2016, a memorandum of which was recorded in the official records of McHenry County, Illinois ("Official Records") on December 29, 2016 at Instrument No. 2016R0050875 ("First Amendment") (hereinafter the Original Agreement and all subsequent amendments are collectively referred to as the "Agreement"); and

WHEREAS, T3 Tower 2 LLC is currently the Lessee under the Agreement as successor in interest to the Original Lessee; and

WHEREAS, the Premises may be used for the purpose of constructing, maintaining and operating a communications facility, including tower structures, equipment shelters, cabinets, meter boards, utilities, antennas, equipment, any related improvements and structures and uses incidental thereto; and

WHEREAS, the Agreement had an Original Term that commenced on June 4, 2002 and expired on June 3, 2007, followed by three (3) extensions of five (5) years each and one (1) extension of four (4) years and eleven (11) months. The First Amendment provides for one extension of five (5) years, and one extension of four (4) years and five (5) months, none of which have been exercised by Lessee. According to the Agreement, the final extension expires on October 31, 2036 (the "Existing Term"); and

WHEREAS, Lessor and Lessee desire to amend the Agreement on the terms and conditions contained herein.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are acknowledged, Lessor and Lessee agree as follows:

1. <u>Recitals; Defined Terms</u>. The parties acknowledge the accuracy of the foregoing recitals. Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement. All references in the Agreement to the capitalized term "Voicestream/T-Mobile" shall

be replaced with "Lessee". All references in the Agreement to the capitalized term "Owner" shall be replaced with "Lessor".

2. Term. At the conclusion of the final Renewal Term (October 31, 2036), Lessee shall be entitled to one (1) additional extension of five (5) years, expiring on October 31, 2041 (the "Additional Renewal Term"). The Renewal Terms, Existing Term, and Additional Renewal Term shall be collectively referred to as the "Lease Term". Notwithstanding anything in the Lease to the contrary, the Lease Term shall automatically be extended for each successive Renewal Term and the Additional Renewal Term, as the case may be, unless Lessee notifies Lessor of its intention not to renew at least ninety (90) days prior to the expiration of the then current five year term. The table in Exhibit C-2 attached hereto and incorporated herein reflects the annual rental payments due and payable by Lessee during the Additional Renewal Term. Exhibit C of the Original Agreement is hereby amended to include the table in Exhibit C-2 attached hereto.

3. Acknowledgment of Subleases. Lessor hereby acknowledges and agrees to the sublease of a portion of the Premises, as expanded, to (i) Nicor Southern or an affiliate or subsidiary (the "Nicor Subtenant"), and (ii) Dish Network or an affiliate or subsidiary (the "Dish Subtenant"), each for purposes of installation, maintenance and replacement of equipment, antennas, cables, fiber, and related accessories on the Premises for the operation of a wireless communications facility thereon. As used herein, the term "sublease" includes any arrangement by which a third party can collocate its equipment at the Premises, whether it is by sublease, license, easement or any other agreement or arrangement.

4. Nicor Subtenant Fee. In addition to the rent currently paid by Lessee to Lessor pursuant to the Agreement, Lessee shall pay to Lessor an annual fee for the Nicor Subtenant equal to One Thousand Three Hundred Eighty and 00/100 Dollars ($1,380.00) per year, partial years to be prorated ("Nicor Subtenant Fee"). The first (1st) payment of the Nicor Subtenant Fee shall be due on the first (1st) day of the month following the commencement of installation activities in the Premises for the Nicor Subtenant, and each subsequent payment shall be due annually thereafter on the same date. If the sublease with the Nicor Subtenant expires or terminates for any reason other than a default by Lessee, Lessee shall no longer be obligated to pay a Nicor Subtenant Fee for such Nicor Subtenant. Lessee shall provide Landlord notice at least thirty (30) days in advance of any such termination. In consideration of the Nicor Subtenant Fee, Lessor hereby waives the requirement under paragraph 5 of the Original Agreement, or elsewhere in the Agreement, that would have otherwise required the Nicor Subtenant to enter into a separate ground lease with Lessor.

5. Dish Subtenant Fee. In addition to the rent currently paid by Lessee to Lessor pursuant to the Agreement, Lessee shall pay to Lessor an annual fee for the Dish Subtenant equal to Three Thousand and 00/100 Dollars ($3,000.00) per year, partial years to be prorated ("Dish Subtenant Fee"). The first (1st) payment of the Dish Subtenant Fee shall be due on the first (1st) day of the month following the commencement of installation activities in the Premises for the Dish Subtenant, and each subsequent payment shall be due annually thereafter on the same date. If the sublease with the Dish Subtenant expires or terminates for any reason other than a default by Lessee, Lessee shall no longer be obligated to pay a Dish Subtenant Fee for such Dish Subtenant. Lessee shall provide Landlord notice at least thirty (30) days in advance of any such termination. In consideration of the Dish Subtenant Fee, Lessor hereby waives the requirement

under pargraph 5 of the Original Agreement, or elsewhere in the Agreement, that would have otherwise required the Dish Subtenant to enter into a separate ground lease with Lessor.

6. Survey. Lessee reserves the right, at its discretion and at its sole cost, to obtain a survey ("Survey") specifically describing the Premises and any access and utility easements associated therewith. Lessee shall be permitted to attach the Survey as an exhibit to this Second Amendment and any related memorandum for recording, which shall update and replace the existing description, at any time prior to or after closing of this Second Amendment.

7. Ground Equipment. Lessee agrees that none of its ground equipment, nor the ground equipment of Lessee's subtenants and licensees, shall extend to a height taller than the fence line existing on the Premises as of the Effective Date. The foregoing sentence expressly does not apply to the communications tower or any equipment shelter.

8. Conditional Signing Bonus. Lessee will pay to Lessor, as additional consideration for amending the Agreement, a one-time amount of Five-Thousand and 00/100 Dollars ($5,000.00) for the full execution of this Second Amendment, payable within sixty (60) days of the full execution of this Second Amendment ("Conditional Signing Bonus"). In the event that this Second Amendment (and any applicable memorandum of Agreement and/or amendment) is not fully executed by both Lessor and Lessee for any reason, Lessee shall have no obligation to pay the Conditional Signing Bonus to Lessor.

9. Representations, Warranties and Covenants of Lessor. Lessor represents, warrants and covenants to Lessee as follows:

a) Lessor is duly authorized to and has the full power and authority to enter into this Second Amendment and to perform all of Lessor's obligations under the Agreement as amended hereby.

b) Lessee is not currently in default under the Agreement, and to Lessor's knowledge, no event or condition has occurred or presently exists which, with notice or the passage of time or both, would constitute a default by Lessee under the Agreement.

c) Lessor agrees to provide such further assurances as may be requested to carry out and evidence the full intent of the parties under the Agreement as amended hereby, and ensure Lessee's continuous and uninterrupted use, possession and quiet enjoyment of the Premises under the Agreement as amended hereby.

d) Lessor acknowledges that the Premises, as defined, shall include any portion of Lessor's Property on which communications facilities or other Lessee improvements exist on the date of this Second Amendment.

10. Notices. Lessee's notice address as stated in Section 4 of the First Amendment of is amended as follows:

If to Lessee:	With a copy to:
T3 Tower 2 LLC	T3 Tower 2 LLC
12920 S.E. 38th Street	c/o CCTMO LLC
Bellevue, WA 98006	Attn: Legal – Real Estate Department
Attn: Leasing Administration	2000 Corporate Drive
	Canonsburg, PA 15317

11. Counterparts. This Second Amendment may be executed in separate and multiple counterparts, each of which shall be deemed an original but all of which taken together shall be deemed to constitute one and the same instrument.

12. Remainder of Agreement Unaffected. In all other respects, the remainder of the Agreement shall remain in full force and effect. Any portion of the Agreement that is inconsistent with this Second Amendment is hereby amended to be consistent.

13. Recordation. Lessee, at its cost and expense, shall have the right to record a memorandum of this Second Amendment in the Official Records at any time following the execution of this Second Amendment by all parties hereto. In addition, Lessee shall have the right in its discretion, to record a notice of lease, affidavit or other form to be determined by Lessee without Lessor's signature in form and content substantially similar to the Memorandum, to provide record notice of the terms of this Second Amendment.

[Signature pages follow]

Lessor and Lessee have caused this Second Amendment to be duly executed on the day and year first written above.

LESSOR:
VILLAGE OF ALGONQUIN, an Illinois municipality

By: ______________________________

Print Name: ________________________

Title: _____________________________

Lessor affirms that this Second Amendment was approved at a duly noticed public meeting held on _____________ 2021

[Lessee Execution Page Follows]

This Second Amendment is executed by Lessee as of the date first written above.

LESSEE:
T3 TOWER 2 LLC, a Delaware limited liability company

By: CCTMO LLC, a Delaware limited liability company
Its: Attorney In Fact

By: ________________________________

Print Name: __________________________

Title: _______________________________

EXHBIT C-2

Year	Amount
35	$45,752.79
36	$47,125.37
37	$48,539.13
38	$49,995.30
39	$51,495.16

Prepared by and upon
recording return to:

Weiss Brown, PLLC
6263 N. Scottsdale Rd.,
Suite 340
Scottsdale, AZ 85250

PIN: 19-27-255-017

Above Space for Recorder's Use Only

MEMORANDUM OF SECOND AMENDMENT TO
SITE AGREEMENT

This Memorandum of Second Amendment to Site Agreement is made effective this _____ day of ___________, 2021 by and between VILLAGE OF ALGONQUIN, an Illinois municipality, with a mailing address of Attn. Village Manager, 2200 Harnish Dr. Algonquin, IL 60102 (hereinafter referred to as "Lessor") and T3 TOWER 2 LLC, a Delaware limited liability company, by and through its Attorney In Fact, CCTMO LLC, a Delaware limited liability company, having a mailing address of 2000 Corporate Drive, Canonsburg, Pennsylvania 15317 (hereinafter referred to as "Lessee").

1. Lessor and Voicestream GSM I Operating Company, LLC ("Original Lessee") entered into a Site Agreement dated June 4, 2002 (the "Original Agreement") whereby Original Lessee leased certain real property, together with access and utility easements, located in McHenry County, Illinois from Lessor (the "Premises"), all located within certain real property owned by Lessor ("Lessor's Property"). Lessor's Property, of which the Premises is a part, is more particularly described on Exhibit A attached hereto.

2. The Original Agreement was amended by that certain First Amendment to Site Agreement dated December 6, 2016, a memorandum of which was recorded in the official records of McHenry County, Illinois ("Official Records") on December 29, 2016 at Instrument No. 2016R0050875 ("First Amendment") (hereinafter the Original Agreement and all subsequent amendments are collectively referred to as the "Agreement").

3. T3 Tower 2 LLC is currently the Lessee under the Agreement as successor in interest to the Original Lessee.

4. The Agreement had an Original Term that commenced on June 4, 2002 and expired on June 3, 2007, followed by three (3) extensions of five (5) years each and one (1) extension of four (4) years and eleven (11) months. The First Amendment provides for one extension of five (5) years, and one extension of four (4) years and five (5) months, none of which have been exercised by Lessee (each extension is referred to as a "Renewal Term"). According to the Agreement, the final Renewal Term expires October 31, 2036.

5. Lessor and Lessee have entered into a Second Amendment to Site Agreement (the "Second Amendment"), of which this is a Memorandum, providing for one (1) additional Renewal Term of five (5) years. Pursuant to the Second Amendment, the final Renewal Term expires on October 31, 2041.

6. The terms, covenants and provisions of the Second Amendment shall extend to and be binding upon the respective executors, administrators, heirs, successors and assigns of Lessor and Lessee.

7. This Memorandum does not contain the social security number of any person.

8. A copy of the Second Amendment is on file with Lessor and Lessee.

[Execution Pages Follow]

IN WITNESS WHEREOF, hereunto and to duplicates hereof, Lessor and Lessee have caused this Memorandum to be duly executed on the day and year first written above.

LESSOR:
VILLAGE OF ALGONQUIN, an Illinois municipality

By: ________________________________

Print Name: _________________________

Title: ______________________________

STATE OF ____________________)
)ss.
COUNTY OF __________________)

On this ____ day of _____________ 2021, before me, the subscriber, a Notary Public in and for said State and County, personally appeared ______________________________, the ______________________________ of VILLAGE OF ALGONQUIN, known or identified to me to be the person whose name is subscribed to the foregoing Memorandum of Second Amendment to Site Agreement, and in due form of law acknowledged that he/she is authorized on behalf of said company to execute all documents pertaining hereto and acknowledged to me that he/she executed the same as his/her voluntary act and deed on behalf of said company.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal in said State and County on the day and year last above written.

Notary Seal

____
(Signature of Notary)

My Commission Expires: ____________________

LESSEE:
T3 TOWER 2 LLC, a Delaware limited liability company

By: CCTMO LLC, a Delaware limited liability company
Its: Attorney In Fact

By: ________________________________

Print Name: __________________________

Title: ______________________________

STATE OF _____________________)
)ss.
COUNTY OF ___________________)

On this ____ day of ______________ 2021, before me, the subscriber, a Notary Public in and for said State and County, personally appeared ________________________________, the ________________________________ of CCTMO LLC, known or identified to me to be the person whose name is subscribed to the foregoing Memorandum of Second Amendment to Site Agreement, and in due form of law acknowledged that he/she is authorized on behalf of said company to execute all documents pertaining hereto and acknowledged to me that he/she executed the same as his/her voluntary act and deed on behalf of said company.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal in said State and County on the day and year last above written.

Notary Seal

____
(Signature of Notary)

My Commission Expires: ______________________

EXHIBIT A
(Legal Description of Lessor's Property)

LOT A IN BLOCK 43 OF FRANK E. MERRILL AND COMPANY ALGONQUIN HILLS UNIT NO. 3 IN THE FRACTIONAL SOUTHEAST ¼ OF SECTION 27, TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, TOGETHER WITH THAT PART OF SAID FRACTIONAL SOUTHEAST ¼ OF SECTION 27 LYING EASTERLY OF THE ALGONQUIN-CARY ROAD AND WESTERLY OF THE MOST WESTERLY LINE OF SAID LOT A AND LYING BETWEEN THE NORTHEASTERLY AND SOUTHWESTERLY LINES OF SAID LOT A EXTENDED WESTERLY TO THE EASTERLY LINE OF ALGONQUIN-CARY ROAD, IN ALL IN MCHENRY COUNTY, ILLINOIS.

Address: 999 Cary Rd., Algonquin, IL 60102

Village of Algonquin

The Gem of the Fox River Valley

M E M O R A N D U M

TO: Tim Schloneger, Village Manager
FROM: Katie Gock, Recreation Superintendent
DATE: November 4, 2021
SUBJECT: Miracle on Main – December 4, 2021

The Recreation Department is relaunching Miracle on Main, with the tree lighting to be held on The Plaza (2 S. Main Street) in old town Algonquin on Saturday, December 4, 2021 from 5:00-7:00pm. The event will include the lighting of the Village Tree, Santa arrival, high school choirs, live music, live reindeer, ice sculptor, roaming entertainment, and vendor/sponsor booths. Downtown businesses are invited to participate in open houses inviting event attendees into their businesses and restaurants provide quick meals or discounts to encourage visitors to enjoy the newly redeveloped downtown.

Pursuant to the Algonquin Municipal Code section 31.04, Recreation staff, with Police recommendation is requesting approval to close South Main Street (between Algonquin Road and Washington Street) during the hours of 3:00pm until the conclusion of the event approximately 8:00pm, as needed for the event (map attached)

If you agree, please forward to the Village Board for approval to hold Miracle on Main at The Plaza (2 S. Main Street) on Saturday, December 4, 2021 from 5:00-7:00p. Thank you for your consideration.

C: Michael Kumbera, Assistant Village Manager
John Bucci, Police Chief

Police Road Closure - Miracle on Main